

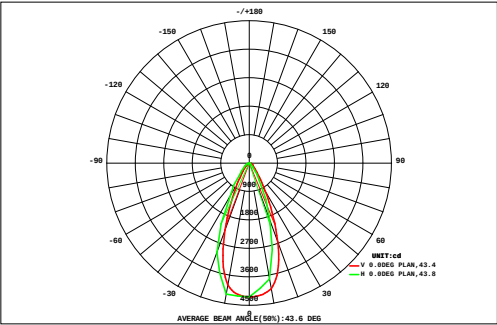
Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)		1557.7 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of Imax	75.7V x 74.2H
	At 50% of Imax	43.8V x 43.4H
	At 90% of Imax	22.6V x 23.6H
Beam Flux	Total	999.8 lumens per klm.
	To 10% of Imax	851.0 lumens per klm.
	To 50% of Imax	534.9 lumens per klm.
	To 90% of Imax	177.4 lumens per klm.
Upward LOR		0.0 %
Downward LOR		100.0 %
Luminaire Efficiency(Light Output Ratio)		100.0 %

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.4V I:0.6237A P:49.04W PF:0.6532 Freq:50.00Hz Lamp Flux:2715.47x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080028
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:55.37lm/W	
MODEL	SP-PZT-R170-12P-RDM	Imax(cd)	4230
NOMINAL POWER(W)	49	AVAILABILITY(%)	85.3
RATED VOLTAGE(V)	120	Avai. FLUX(lm)	2317
NOMINAL FLUX(lm)	2715.47	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	2715
TEST VOLTAGE(V)	120	θ @50%(H,V)	43,44DEG

AREA FLUX DIAGRAM																	UNIT:lm			Φ t	Φ a
72	0.00	0.03	0.20	0.46	0.77	1.08	1.36	1.56	1.64	1.60	1.45	1.20	0.89	0.57	0.29	0.07	0.01	0.00	13.2	0.00	
64	0.02	0.19	0.49	0.90	1.36	1.86	2.28	2.57	2.72	2.68	2.46	2.10	1.64	1.15	0.70	0.34	0.07	0.00	23.5	0.00	
56	0.06	0.33	0.75	1.33	2.00	2.72	3.37	3.89	4.16	4.13	3.79	3.22	2.51	1.78	1.14	0.60	0.22	0.02	36.0	0.00	
48	0.12	0.48	1.03	1.79	2.74	3.85	5.06	6.20	6.88	6.82	6.03	4.87	3.64	2.50	1.57	0.86	0.37	0.05	54.9	4.01	
40	0.20	0.64	1.34	2.33	3.71	5.64	8.24	11.2	13.2	12.9	10.7	7.74	5.19	3.28	1.98	1.07	0.47	0.09	89.9	55.4	
32	0.25	0.75	1.56	2.85	4.98	8.59	14.5	22.2	27.6	26.8	20.5	13.2	7.63	4.29	2.43	1.29	0.58	0.14	160	137	
24	0.27	0.82	1.72	3.30	6.55	13.5	27.0	44.9	57.0	55.8	42.1	24.0	11.7	5.63	2.90	1.47	0.66	0.18	299	281	
VERTICAL (DEG)	0.27	0.84	1.78	3.57	7.67	17.9	39.1	63.5	76.1	76.3	62.4	37.0	16.5	6.93	3.24	1.59	0.72	0.20	415	399	
	0.27	0.83	1.79	3.68	8.27	20.6	46.3	73.1	83.9	84.2	72.1	44.0	18.9	7.39	3.29	1.59	0.70	0.19	471	455	
	0.27	0.81	1.75	3.61	8.23	20.7	45.5	69.6	79.0	78.7	66.8	39.7	16.6	6.50	2.96	1.44	0.60	0.15	443	427	
	0.22	0.70	1.52	3.07	6.33	14.6	32.3	54.2	67.1	65.9	50.5	28.4	12.5	5.39	2.62	1.31	0.53	0.12	347	330	
	0.16	0.58	1.23	2.33	4.41	8.45	16.2	27.3	35.9	35.5	26.2	15.4	8.06	4.09	2.14	1.07	0.44	0.09	190	168	
	0.09	0.44	0.98	1.76	3.04	5.11	8.18	12.2	15.8	15.7	12.0	7.73	4.71	2.80	1.61	0.82	0.33	0.05	93.3	61.7	
	0.04	0.28	0.71	1.28	2.03	2.97	3.84	4.47	4.91	4.74	4.31	3.55	2.58	1.76	1.09	0.56	0.19	0.01	39.3	0.00	
	0.01	0.13	0.43	0.85	1.29	1.76	2.16	2.38	2.43	2.41	2.28	1.93	1.50	1.04	0.62	0.28	0.04	0.00	21.5	0.00	
	0.00	0.01	0.12	0.31	0.57	0.84	1.12	1.34	1.41	1.32	1.16	0.97	0.74	0.50	0.22	0.05	0.01	0.00	10.7	0.00	
	0.00	0.00	0.01	0.04	0.12	0.21	0.30	0.37	0.41	0.41	0.36	0.26	0.15	0.08	0.04	0.01	0.00	0.00	2.77	0.00	
-72	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.05	0.06	0.06	0.06	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.39	0.00	
-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL (DEG)					16	24	32	40	48	56	64	72	
Φ t	2.25	7.86	17.4	33.5	64.1	130	257	401	480	476	385	235	115	55.7	28.9	14.4	5.94	1.29	2711	---	
Φ a	0.00	0.00	0.00	0.00	25.6	102	231	377	456	453	360	210	86.7	15.5	0.00	0.00	0.00	0.00	---	2317	

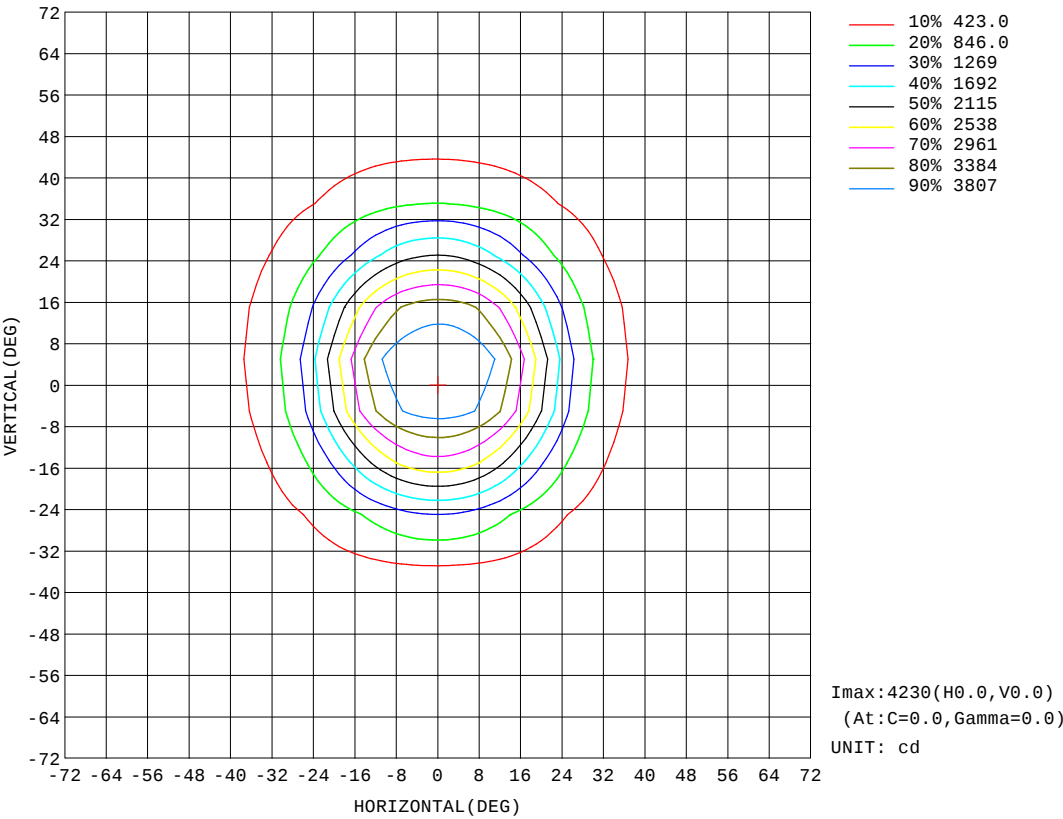
one-half-peak spread: U:18.9,D:25.1 , L:22.9,R:20.8 NEMA Beam Type: Type 5

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.4V I:0.6237A P:49.04W PF:0.6532 Freq:50.00Hz Lamp Flux:2715.47x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080028
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

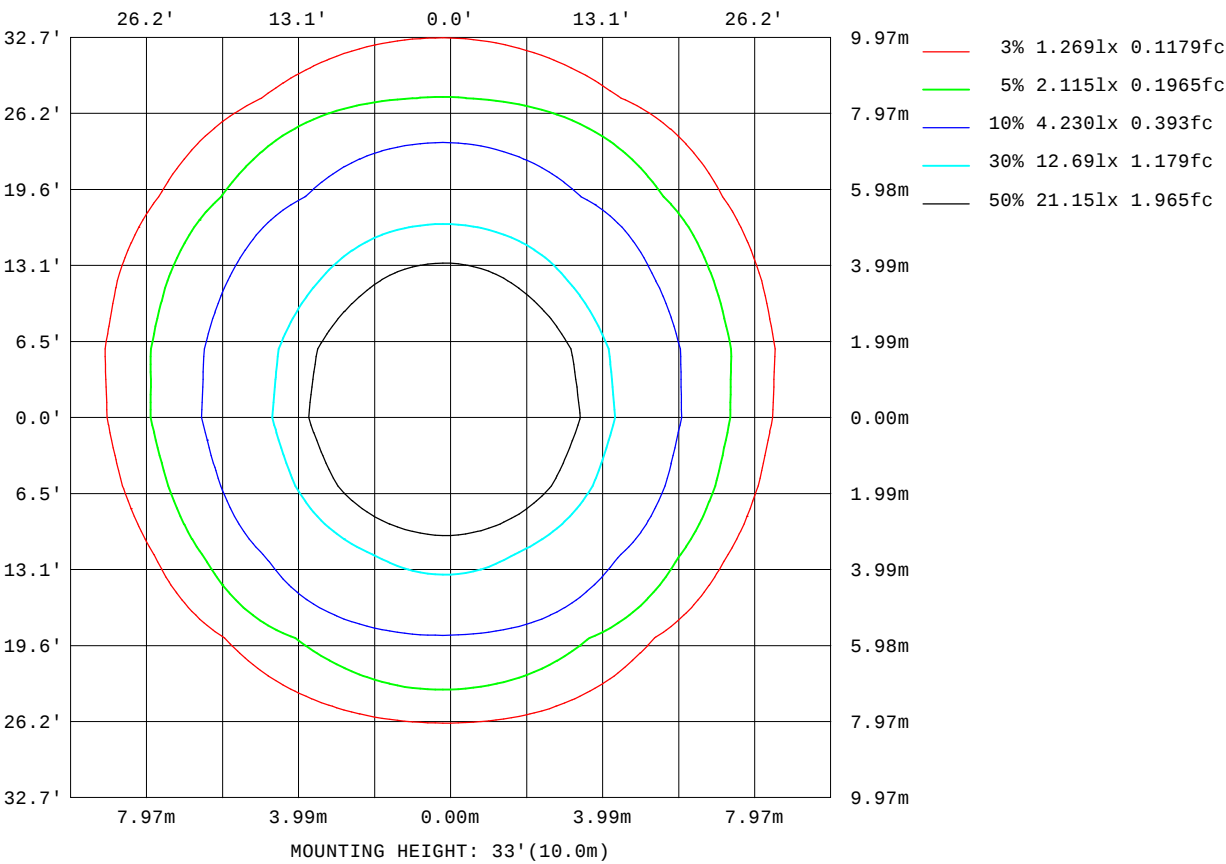


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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

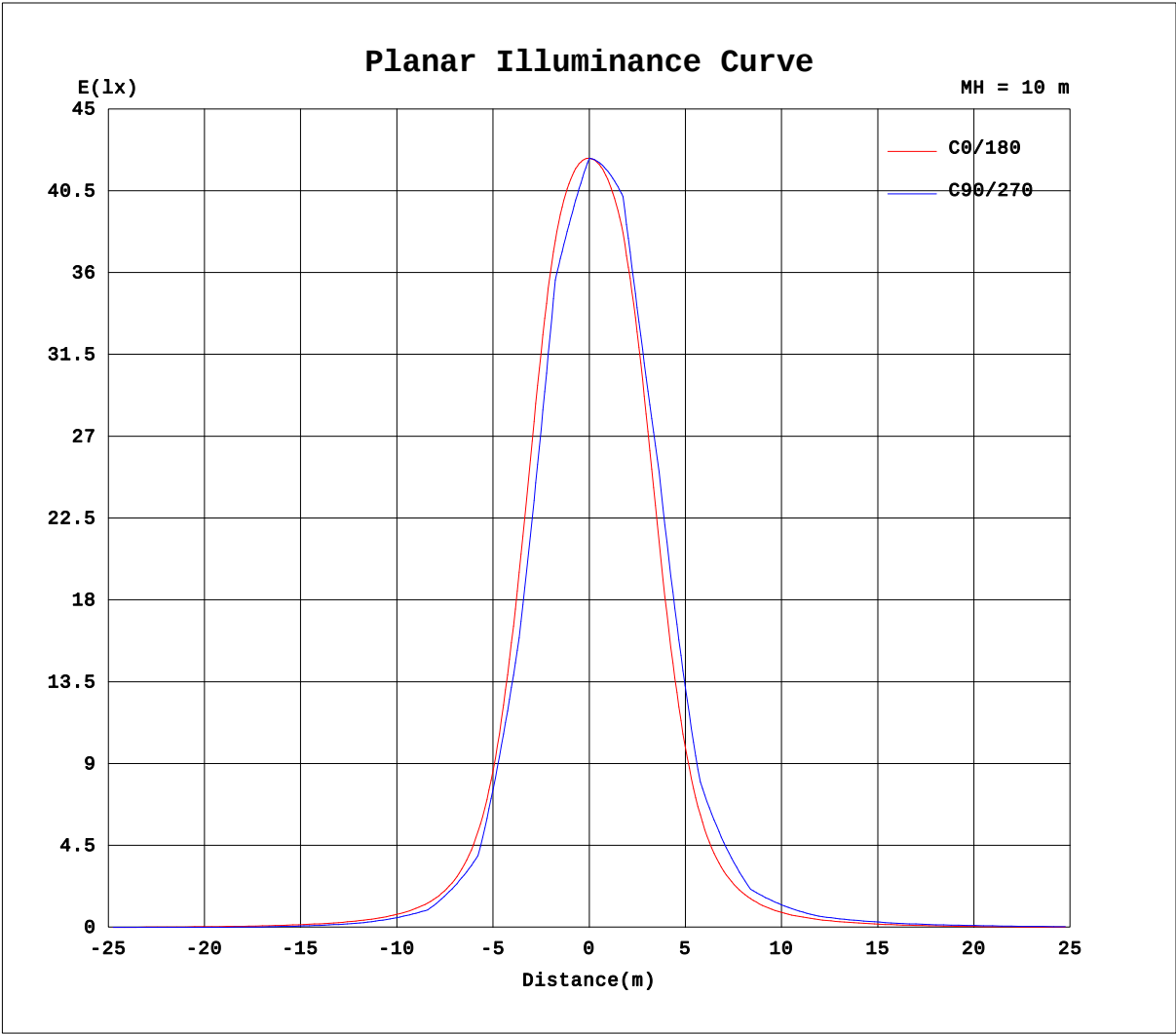
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SPEC.:	DIM.:	SERIAL No.:2025080028
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



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Test Speed: HIGH
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Test Date:2025-08-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve

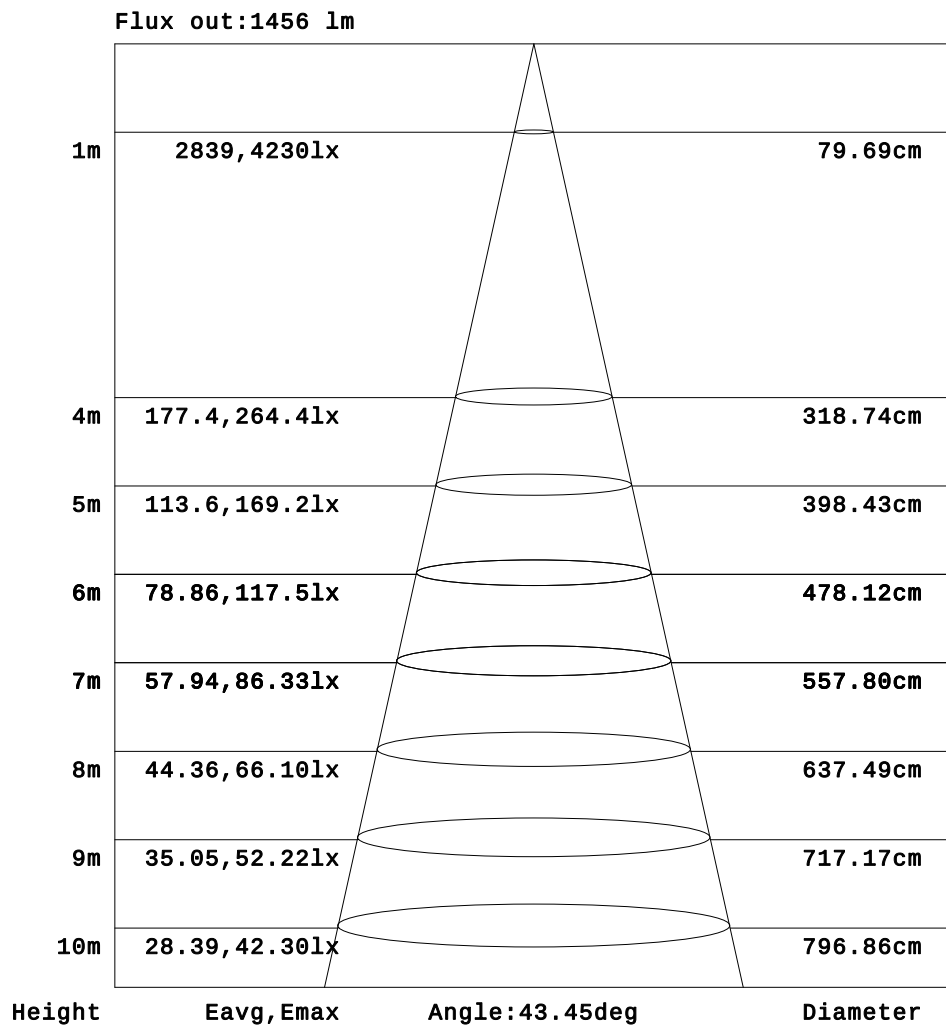


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.4V I:0.6237A P:49.04W PF:0.6532 Freq:50.00Hz Lamp Flux:2715.47x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080028
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.4V I:0.6237A P:49.04W PF:0.6532 Freq:50.00Hz Lamp Flux:2715.47x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080028
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

Table--1

UNIT: cd

H(°) \ V(°)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	3.73	5.32	6.64	7.92	9.00	9.76	10.2	10.3
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	4.64	8.13	11.2	13.8	16.3	18.4	19.8	20.5	20.6
-55	0.00	0.00	0.00	0.00	0.00	0.00	0.11	4.10	8.68	13.4	20.3	27.3	33.9	40.2	46.3	51.5	55.3	57.0	56.7
-50	0.00	0.00	0.00	0.00	0.00	1.30	9.98	19.3	28.8	39.0	49.2	59.2	69.1	78.5	86.5	91.9	93.6	92.2	
-45	0.00	0.00	0.00	0.00	2.02	9.12	20.9	34.5	48.8	63.1	77.1	92.1	108	122	135	146	153	154	
-40	0.00	0.00	0.00	0.00	6.61	21.0	37.1	55.4	74.6	92.9	111	131	153	172	189	203	213	216	
-35	0.00	0.00	0.00	0.00	0.60	11.3	28.7	47.2	67.9	89.7	114	143	179	221	267	314	362	400	412
-30	0.00	0.00	0.00	0.00	3.96	22.7	43.5	65.3	88.8	114	145	189	242	307	380	458	538	597	607
-25	0.00	0.00	0.00	0.00	5.87	25.8	48.0	71.7	98.2	130	173	235	324	449	622	830	1040	1204	1264
-20	0.00	0.00	0.00	0.00	15.0	37.6	61.8	88.2	119	161	222	313	449	653	943	1288	1618	1854	1916
-15	0.00	0.00	0.00	0.01	14.0	37.3	62.8	91.2	126	175	246	357	547	866	1337	1890	2386	2708	2823
-10	0.00	0.00	0.00	0.94	22.2	46.8	74.5	107	149	212	306	464	749	1245	1948	2710	3314	3642	3722
-5	0.00	0.00	0.00	0.48	20.1	45.3	74.2	107	150	212	311	480	791	1338	2125	2965	3584	3884	3978
0	0.00	0.00	0.00	4.08	27.7	55.0	86.0	123	171	243	368	592	1009	1715	2648	3515	4026	4192	4230
5	0.00	0.00	0.00	1.32	23.6	50.5	81.4	117	162	229	339	530	879	1484	2354	3254	3877	4139	4216
10	0.00	0.00	0.00	5.50	29.4	57.9	90.2	127	176	249	368	575	946	1572	2437	3300	3890	4136	4206
15	0.00	0.00	0.00	1.62	23.9	51.0	81.9	117	159	221	316	472	737	1177	1826	2552	3155	3498	3610
20	0.00	0.00	0.00	5.19	28.2	56.2	86.7	121	164	225	314	454	673	1016	1506	2076	2603	2934	3010
25	0.00	0.00	0.00	0.79	20.6	46.3	74.5	106	144	193	260	359	504	721	1030	1406	1776	2037	2124
30	0.00	0.00	0.00	1.77	22.3	47.6	74.4	105	141	185	240	313	408	536	698	890	1079	1201	1229
35	0.00	0.00	0.00	0.01	14.6	37.2	61.8	88.5	120	156	198	251	316	399	502	620	739	823	851
40	0.00	0.00	0.00	0.00	15.1	36.7	59.2	84.0	113	143	176	213	254	300	351	400	440	465	469
45	0.00	0.00	0.00	0.00	6.62	25.0	45.5	66.6	91.3	117	144	173	204	236	270	302	330	348	353
50	0.00	0.00	0.00	0.00	4.97	21.6	39.9	58.4	79.7	101	123	146	166	186	203	217	229	235	236
55	0.00	0.00	0.00	0.00	0.97	11.1	26.7	42.4	59.9	78.3	96.1	114	132	148	162	173	182	187	188
60	0.00	0.00	0.00	0.00	0.00	6.65	19.7	32.9	47.4	62.5	76.5	90.5	104	116	125	133	138	140	140
65	0.00	0.00	0.00	0.00	0.00	2.14	8.54	18.5	29.5	41.4	53.2	64.3	75.1	85.0	93.1	99.3	104	106	106
70	0.00	0.00	0.00	0.00	0.00	0.00	0.52	8.17	16.3	25.1	34.3	42.4	50.2	57.6	63.7	68.1	70.9	72.1	71.6
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29	7.32	11.6	16.2	21.0	26.5	31.6	36.1	39.5	41.7	42.7	42.3
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	4.93	7.60	10.0	11.9	13.0	13.3	12.6
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG
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 Test Date:2025-08-05

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 V(B) Interval: 5.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
 Humidity:83%
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Table--2																		UNIT: cd	
H(°) \ V(°)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-65	10.0	9.58	8.58	6.66	4.17	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-60	19.9	18.9	16.5	12.4	7.31	2.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-55	54.5	51.3	47.1	41.5	34.9	28.1	22.0	16.7	10.8	5.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-50	87.9	82.2	75.6	68.1	59.7	51.2	42.0	31.1	19.2	7.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-45	151	143	131	115	99.7	84.4	69.5	55.2	40.6	26.7	13.9	5.15	0.00	0.00	0.00	0.00	0.00	0.00	
-40	212	200	180	156	134	111	91.1	73.6	56.5	40.2	24.1	7.15	0.00	0.00	0.00	0.00	0.00	0.00	
-35	396	360	310	257	206	164	130	103	79.7	58.1	38.8	20.9	6.38	0.00	0.00	0.00	0.00	0.00	
-30	570	502	419	336	260	201	158	123	93.9	67.9	46.1	28.0	8.61	0.00	0.00	0.00	0.00	0.00	
-25	1199	1025	799	591	425	303	220	164	122	88.2	60.8	38.5	18.6	2.06	0.00	0.00	0.00	0.00	
-20	1774	1463	1093	773	535	367	257	186	135	96.7	65.8	40.9	20.6	0.96	0.00	0.00	0.00	0.00	
-15	2712	2374	1862	1309	843	529	341	232	165	119	82.4	52.5	28.9	7.92	0.00	0.00	0.00	0.00	
-10	3551	3103	2406	1638	1002	599	373	247	174	125	86.0	53.7	28.7	7.63	0.00	0.00	0.00	0.00	
-5	3900	3602	2974	2119	1314	763	454	290	199	141	99.0	64.3	36.1	13.2	0.00	0.00	0.00	0.00	
0	4171	3910	3220	2252	1356	770	454	288	197	138	97.3	62.7	33.7	10.6	0.00	0.00	0.00	0.00	
5	4171	3905	3265	2344	1462	846	500	317	215	151	107	72.0	41.3	16.1	0.00	0.00	0.00	0.00	
10	4113	3711	2969	2056	1268	748	454	294	203	143	102	68.4	37.8	12.8	0.00	0.00	0.00	0.00	
15	3511	3154	2540	1799	1152	709	446	296	208	148	105	72.2	42.2	16.2	0.00	0.00	0.00	0.00	
20	2814	2389	1821	1256	824	542	364	255	186	133	94.1	63.8	35.1	10.5	0.00	0.00	0.00	0.00	
25	2023	1755	1387	1006	697	481	336	242	180	132	94.0	64.6	37.6	12.8	0.00	0.00	0.00	0.00	
30	1146	985	797	619	468	352	263	200	153	114	80.9	54.5	29.2	6.49	0.00	0.00	0.00	0.00	
35	813	722	607	491	388	304	236	182	142	108	76.6	52.0	28.6	6.78	0.00	0.00	0.00	0.00	
40	450	414	369	320	272	226	185	147	117	88.1	61.7	40.1	18.6	0.69	0.00	0.00	0.00	0.00	
45	344	323	294	262	227	194	161	130	104	79.2	55.7	35.9	16.6	1.50	0.00	0.00	0.00	0.00	
50	231	221	207	190	169	147	125	102	81.6	60.2	41.6	24.0	6.70	0.00	0.00	0.00	0.00	0.00	
55	185	178	168	155	139	122	103	84.7	67.2	49.5	33.1	18.0	5.08	0.00	0.00	0.00	0.00	0.00	
60	137	132	124	114	102	88.6	73.9	60.1	45.7	31.8	18.5	5.95	0.00	0.00	0.00	0.00	0.00	0.00	
65	104	99.8	93.9	86.0	76.6	65.9	54.6	43.5	32.1	20.8	10.7	4.30	0.00	0.00	0.00	0.00	0.00	0.00	
70	69.5	65.9	60.9	54.6	47.1	38.8	30.7	22.4	13.9	5.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
75	40.8	38.3	34.7	30.2	25.1	20.2	16.2	12.1	7.80	3.56	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
80	11.2	9.39	6.81	3.78	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks: