

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1012011

Luminaire Tested: S123DIP-B775D365UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012011
REPORT IS A COMBINATION OF REPORTS P990380 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D365UB35-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

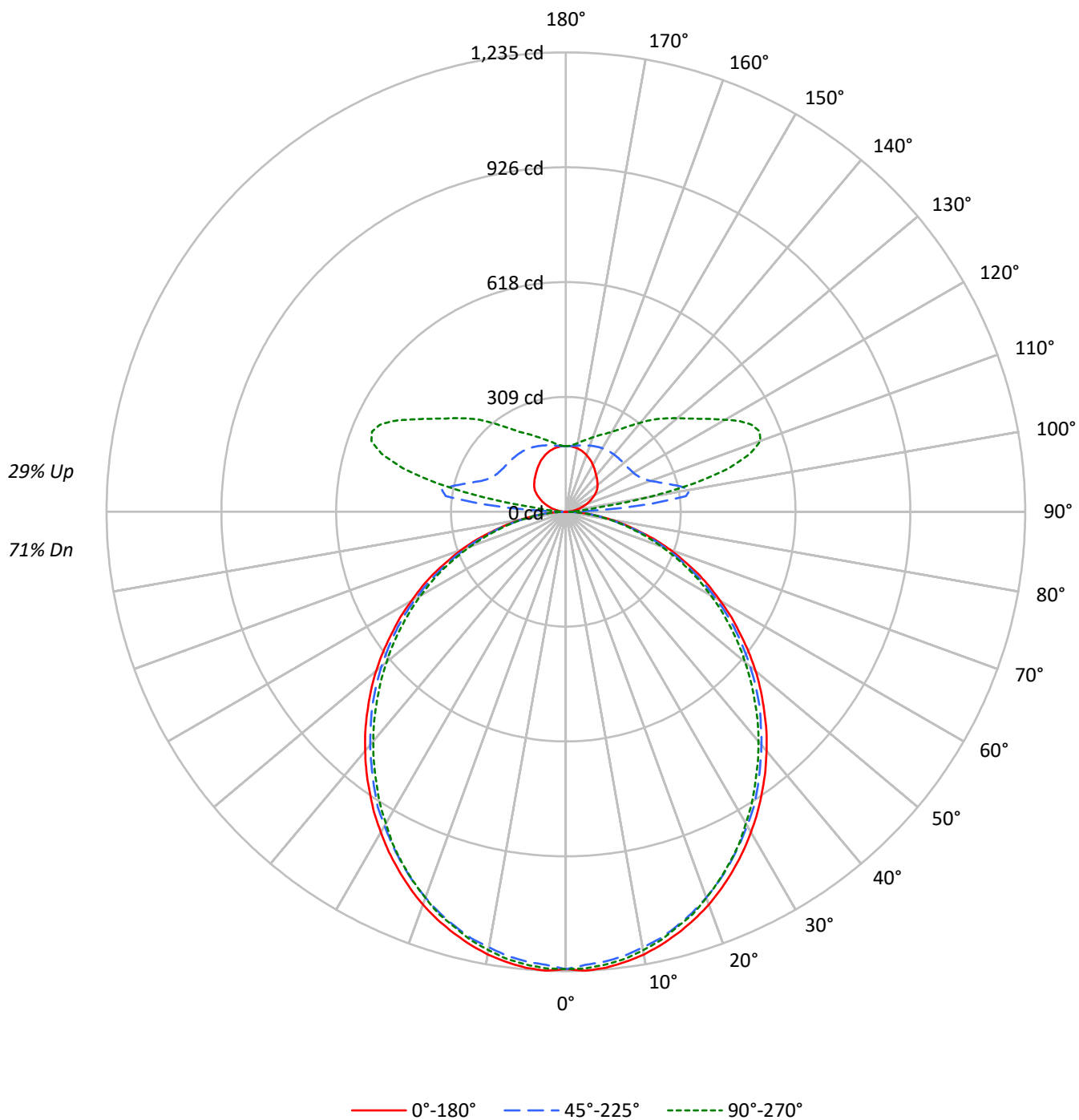
Lumens per Lamp: N/A
Luminaire Lumens: 4531.1 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	65	63
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45
4	78	67	58	52	73	63	56	50	57	51	46	51	47	43	46	42	39
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	37	34
6	66	53	45	39	62	51	43	38	46	40	35	42	37	32	38	33	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	34	30	27
8	57	44	36	30	54	42	35	29	38	32	28	35	30	26	32	27	24
9	53	40	33	27	50	39	31	26	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	36	29	24	33	27	22	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13235	13235	13235
5°	13268	12778	12759
10°	13150	12346	12219
15°	12967	11895	11631
20°	12757	11396	11047
25°	12486	10870	10424
30°	12190	10325	9768
35°	11879	9767	9117
40°	11552	9183	8475
45°	11195	8612	7806
50°	10832	7977	7134
55°	10364	7316	6452
60°	9882	6586	5728
65°	9430	5797	4971
70°	8779	4922	4090
75°	7844	3897	3175
80°	6775	2739	2245
85°	5283	1473	1124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11195 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	2.6
10°-20°	327.3	7.2
20°-30°	483.4	10.7
30°-40°	564.6	12.5
40°-50°	567.5	12.5
50°-60°	498.6	11.0
60°-70°	371.3	8.2
70°-80°	211.3	4.7
80°-90°	61.1	1.3
90°-100°	100.2	2.2
100°-110°	280.2	6.2
110°-120°	273.2	6.0
120°-130°	217.6	4.8
130°-140°	171.7	3.8
140°-150°	128.1	2.8
150°-160°	89.4	2.0
160°-170°	52.5	1.2
170°-180°	17.1	0.4
0°-30°	926.6	20.5
0°-40°	1491.2	32.9
0°-60°	2557.3	56.4
0°-90°	3201.0	70.6
90°-120°	653.7	14.4
90°-150°	1171.1	25.8
90°-180°	1330.0	29.4
0°-180°	4531.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1231	1225	1214	1224	1222	117
15°	1171	1167	1153	1162	1156	330
25°	1064	1057	1044	1044	1041	490
35°	920	913	900	893	888	575
45°	754	750	736	723	718	582
55°	572	571	557	546	540	512
65°	390	385	374	366	363	385
75°	206	202	199	194	190	220
85°	55	53	53	51	51	59
90°	1	4	9	10	10	5
95°	12	39	212	62	41	13
105°	41	61	287	502	454	44
115°	73	91	220	482	552	72
125°	102	120	205	371	436	90
135°	119	142	202	306	353	92
145°	136	156	200	251	276	85
155°	155	167	193	220	229	71
165°	169	174	185	196	200	48
175°	176	176	178	180	180	17
180°	176	176	176	176	176	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1234.8	1230.6	1219.0	1229.6	1228.5
5°	1230.6	1225.3	1213.7	1224.3	1222.2
7.5°	1221.1	1215.8	1204.2	1213.7	1212.6
10°	1208.4	1203.1	1189.4	1198.9	1196.8
12.5°	1191.5	1187.3	1174.6	1180.9	1179.9
15°	1171.4	1167.2	1153.4	1161.9	1155.6
17.5°	1149.2	1143.9	1130.2	1136.5	1134.4
20°	1123.8	1117.5	1103.7	1108.0	1104.8
22.5°	1095.3	1088.9	1075.2	1078.4	1074.1
25°	1063.6	1057.2	1043.5	1044.5	1041.4
27.5°	1030.8	1024.5	1009.7	1010.7	1007.5
30°	994.9	989.6	974.8	974.8	967.4
32.5°	958.9	951.5	940.9	933.5	930.4
35°	919.8	913.4	899.7	893.4	888.1
37.5°	880.7	872.2	858.5	851.1	847.9
40°	839.4	833.1	818.3	809.8	805.6
42.5°	798.2	790.8	776.0	767.5	763.3
45°	753.8	749.6	735.8	723.1	717.9
47.5°	710.5	704.1	691.4	678.7	674.5
50°	666.1	660.8	647.0	635.4	629.1
52.5°	619.5	616.4	601.6	592.0	585.7
55°	572.0	570.9	557.2	545.5	540.2
57.5°	527.6	523.3	512.8	502.2	495.8
60°	478.9	477.9	465.2	455.7	450.4
62.5°	435.6	432.4	419.7	410.2	407.0
65°	390.1	384.8	374.3	365.8	362.6
67.5°	341.5	337.3	328.8	321.4	317.2
70°	298.1	291.8	285.5	278.1	272.8
72.5°	252.7	248.4	241.0	234.7	232.6
75°	206.2	201.9	198.8	193.5	190.3
77.5°	164.9	162.8	158.6	154.4	154.4
80°	124.8	121.6	119.5	118.4	118.4
82.5°	85.6	85.6	85.6	83.5	82.5
85°	55.0	52.9	52.9	50.7	50.7
87.5°	27.5	24.3	23.3	22.2	22.2
90°	0.7	4.2	8.9	10.0	10.4
92.5°	5.4	21.4	66.4	22.6	18.9
95°	12.1	39.4	211.8	61.8	41.4
97.5°	19.3	45.2	325.7	155.4	85.0
100°	26.4	49.8	338.2	325.0	223.9
102.5°	33.9	55.2	315.0	435.2	354.6
105°	41.4	61.2	287.1	502.2	454.3
107.5°	49.3	68.4	262.5	531.6	519.3
110°	57.9	75.7	242.1	532.5	556.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.7	83.4	228.6	512.2	563.9
115°	73.2	91.2	219.6	481.6	552.5
117.5°	80.7	98.8	213.6	448.7	527.5
120°	88.6	106.2	209.6	417.6	494.6
122.5°	95.4	113.4	207.1	393.2	463.9
125°	101.8	120.2	205.0	371.4	435.7
127.5°	106.8	126.6	203.9	353.6	411.4
130°	111.4	132.3	202.8	337.2	391.4
132.5°	115.0	137.4	202.5	321.8	371.8
135°	119.3	142.3	202.1	305.8	353.2
137.5°	123.2	146.2	201.4	290.9	333.5
140°	127.1	149.8	201.1	276.2	312.8
142.5°	131.4	153.0	200.3	262.8	293.6
145°	136.1	155.9	199.6	250.9	276.1
147.5°	140.7	158.9	198.6	241.6	261.1
150°	145.3	161.4	197.1	233.4	248.2
152.5°	150.0	164.1	195.3	226.2	237.5
155°	154.6	166.8	193.2	219.6	228.9
157.5°	158.2	169.1	191.4	213.2	220.7
160°	162.5	171.0	189.3	207.4	212.8
162.5°	165.7	172.5	187.1	201.8	205.7
165°	168.9	173.8	185.0	196.2	199.6
167.5°	171.4	174.8	182.8	191.4	193.6
170°	173.6	175.4	180.7	187.2	188.2
172.5°	175.0	175.9	178.9	183.4	183.2
175°	176.1	176.2	177.5	180.0	179.6
177.5°	176.8	176.4	176.4	177.8	177.1
180°	176.4	176.4	176.4	176.4	176.4

(END OF REPORT)