

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: P1028380

Luminaire Tested: S125DIP-B850D850UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1028380
REPORT IS A COMBINATION OF REPORTS P1002667 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIP-B850D850UB27-4F0-XX-W2A-F4
Description: Define 5 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

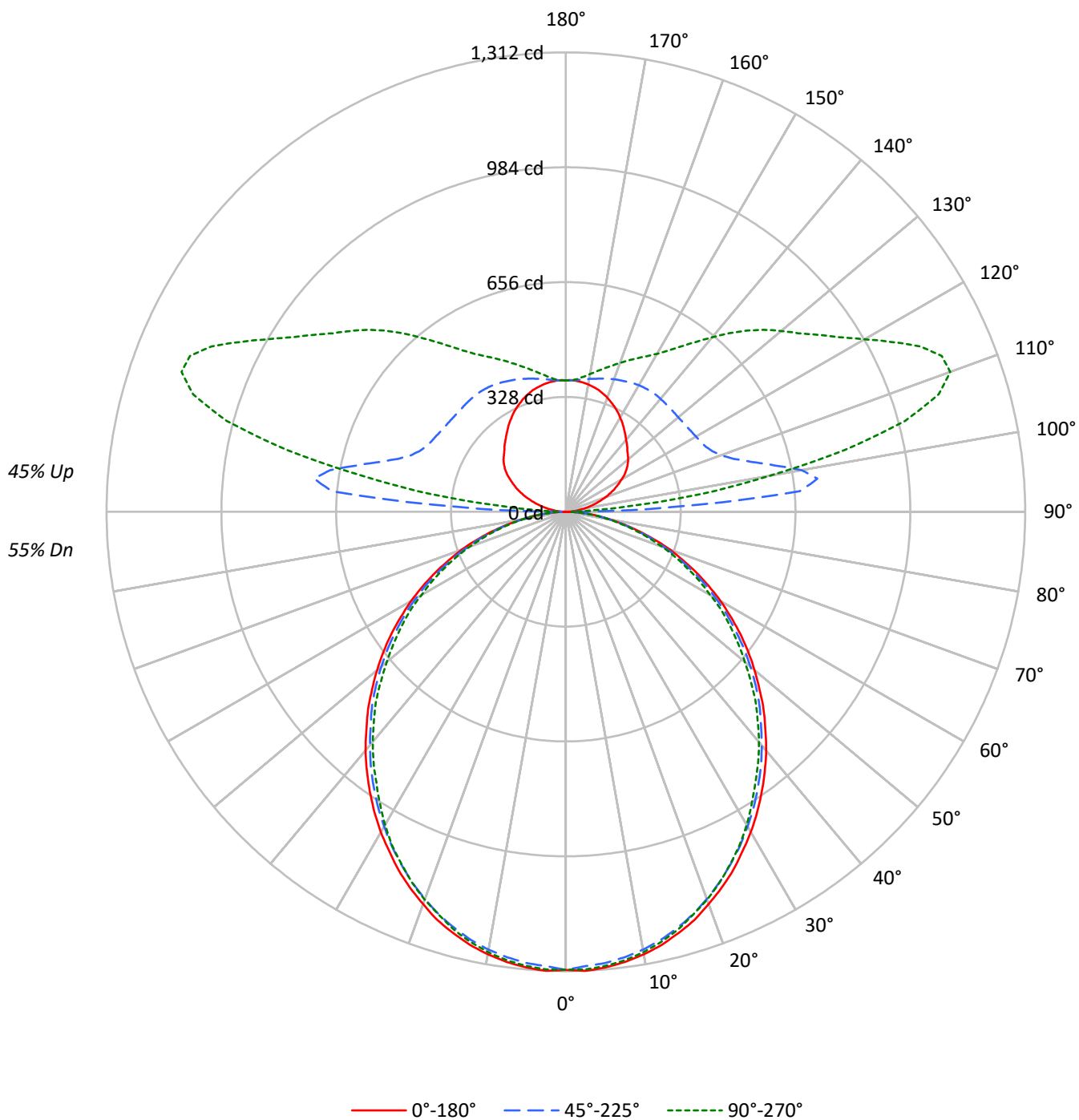
Lumens per Lamp: N/A
Luminaire Lumens: 6232.8 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 57
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43
3	82	72	65	59	76	67	61	56	58	53	49	50	46	43	41	39	36
4	75	64	56	50	69	60	53	47	52	46	42	44	40	36	37	34	31
5	69	57	49	43	64	53	46	41	46	40	36	40	35	32	33	30	27
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8382	8382	8382
5°	8383	8187	8203
10°	8313	7999	7975
15°	8204	7775	7706
20°	8056	7515	7397
25°	7898	7231	7066
30°	7707	6935	6718
35°	7503	6625	6328
40°	7292	6297	5981
45°	7063	5978	5613
50°	6812	5616	5184
55°	6564	5216	4788
60°	6268	4794	4329
65°	5912	4307	3854
70°	5551	3746	3306
75°	4945	3084	2673
80°	4214	2304	1965
85°	3253	1364	1084

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	2.0
10°-20°	348.7	5.6
20°-30°	514.8	8.3
30°-40°	600.6	9.6
40°-50°	603.2	9.7
50°-60°	529.5	8.5
60°-70°	394.4	6.3
70°-80°	225.2	3.6
80°-90°	66.5	1.1
90°-100°	282.8	4.5
100°-110°	587.4	9.4
110°-120°	548.6	8.8
120°-130°	443.9	7.1
130°-140°	356.7	5.7
140°-150°	269.2	4.3
150°-160°	189.6	3.0
160°-170°	111.7	1.8
170°-180°	36.3	0.6
0°-30°	986.9	15.8
0°-40°	1587.5	25.5
0°-60°	2720.3	43.6
0°-90°	3406.5	54.7
90°-120°	1418.8	22.8
90°-150°	2488.7	39.9
90°-180°	2826.0	45.3
0°-180°	6232.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1306	1304	1294	1303	1302	124
15°	1245	1242	1231	1236	1236	351
25°	1130	1125	1112	1114	1110	520
35°	976	972	957	952	944	611
45°	799	795	782	770	767	616
55°	609	606	591	582	574	543
65°	411	409	397	388	384	408
75°	218	216	211	208	204	232
85°	57	58	58	57	55	62
90°	1	7	12	16	17	6
95°	25	74	671	304	178	26
105°	86	120	549	1081	1003	90
115°	153	184	441	950	1118	151
125°	212	248	422	756	880	188
135°	248	299	419	633	731	193
145°	289	331	421	524	577	181
155°	330	355	410	464	484	152
165°	360	370	394	418	424	102
175°	375	375	378	382	381	36
180°	376	376	376	376	376	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.2	1308.2	1308.2	1308.2	1308.2
2.5°	1312.4	1309.3	1298.9	1309.3	1308.2
5°	1306.2	1304.1	1293.7	1303.1	1302.0
7.5°	1296.8	1294.8	1283.4	1292.7	1291.7
10°	1283.4	1281.3	1269.9	1278.2	1277.2
12.5°	1266.8	1262.7	1252.3	1258.6	1258.6
15°	1245.1	1242.0	1230.6	1235.8	1235.8
17.5°	1222.3	1217.2	1205.8	1212.0	1206.8
20°	1192.3	1190.2	1176.8	1184.0	1178.9
22.5°	1162.3	1158.2	1145.7	1149.9	1146.8
25°	1130.2	1125.0	1111.6	1113.7	1110.5
27.5°	1093.0	1089.8	1076.4	1077.4	1074.3
30°	1056.7	1053.6	1038.1	1036.0	1032.9
32.5°	1017.4	1012.2	998.8	994.6	988.4
35°	976.0	971.9	957.4	952.2	943.9
37.5°	933.6	928.4	914.9	907.7	902.5
40°	890.1	884.9	870.4	861.1	858.0
42.5°	843.5	839.4	824.9	816.6	811.4
45°	799.0	794.9	782.5	770.0	766.9
47.5°	750.4	751.4	735.9	723.5	716.2
50°	703.8	700.7	688.3	674.8	667.6
52.5°	656.2	654.1	640.7	629.3	621.0
55°	608.6	605.5	591.0	581.7	574.4
57.5°	557.9	556.8	544.4	532.0	528.9
60°	510.3	506.1	494.7	484.4	477.1
62.5°	460.6	457.5	448.2	436.8	431.6
65°	410.9	408.8	397.4	388.1	384.0
67.5°	362.2	358.1	349.8	341.5	339.5
70°	316.7	311.5	302.2	296.0	291.9
72.5°	267.0	263.9	258.7	251.5	247.4
75°	218.4	216.3	211.1	208.0	203.9
77.5°	172.8	171.8	168.7	166.6	163.5
80°	130.4	130.4	128.3	127.3	125.2
82.5°	93.1	91.1	91.1	89.0	89.0
85°	56.9	58.0	58.0	56.9	54.9
87.5°	27.9	27.9	26.9	26.9	24.8
90°	0.8	6.8	12.1	15.9	17.4
92.5°	11.4	62.1	302.1	80.6	56.0
95°	25.0	73.8	670.8	304.4	177.9
97.5°	38.6	79.9	724.5	549.6	389.9
100°	53.0	91.6	683.7	776.8	590.5
102.5°	68.9	104.8	611.7	969.0	814.6
105°	85.6	119.6	548.9	1080.8	1003.1
107.5°	101.5	135.2	502.0	1112.2	1116.7
110°	118.9	151.4	470.9	1082.2	1168.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	136.3	167.7	452.7	1019.8	1162.1
115°	152.9	184.4	440.6	949.8	1117.5
117.5°	168.1	201.4	433.8	886.2	1050.1
120°	183.2	217.6	429.3	832.8	985.0
122.5°	199.1	233.6	425.5	790.0	927.4
125°	212.0	248.4	422.5	755.6	880.5
127.5°	222.6	262.8	420.9	726.0	837.3
130°	232.4	276.4	419.4	696.2	803.3
132.5°	240.0	288.5	419.4	664.0	769.2
135°	248.3	298.7	419.4	633.3	731.4
137.5°	258.9	308.1	420.2	601.2	692.0
140°	268.0	316.1	420.9	571.6	650.3
142.5°	278.6	323.6	421.7	546.2	611.7
145°	289.2	331.2	420.9	524.3	576.9
147.5°	300.6	338.0	419.4	505.4	545.9
150°	310.4	344.1	417.2	489.8	520.9
152.5°	321.0	350.2	414.1	476.6	501.2
155°	330.1	355.1	410.3	463.8	483.8
157.5°	338.4	360.0	406.6	451.6	467.9
160°	346.7	363.8	402.8	439.4	452.0
162.5°	353.6	367.5	398.2	428.5	437.6
165°	360.4	370.2	393.7	417.5	424.0
167.5°	364.9	371.7	389.1	407.3	411.1
170°	369.5	373.6	385.4	397.4	399.7
172.5°	372.5	374.4	380.8	389.5	389.1
175°	374.8	374.8	377.8	382.3	380.8
177.5°	376.3	374.8	375.5	377.8	375.5
180°	375.5	375.5	375.5	375.5	375.5

(END OF REPORT)