

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: P1011453

Luminaire Tested: S123DIP-B1165D805UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011453
REPORT IS A COMBINATION OF REPORTS P989615 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB50-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

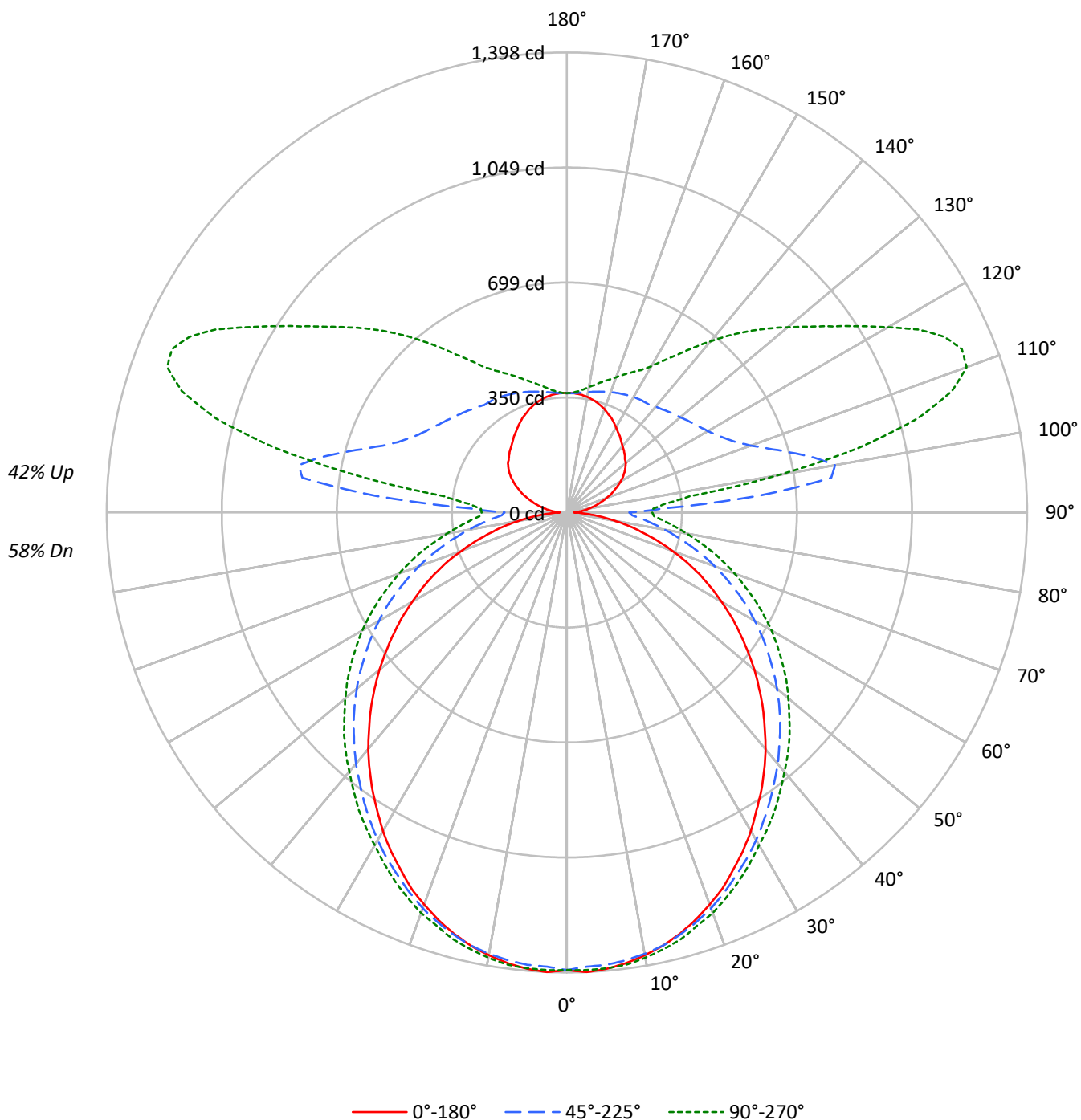
Lumens per Lamp: N/A
Luminaire Lumens: 7409.3 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63
1	98	93	89	85	91	87	83	80	75	72	70	64	62	60	54	52	51
2	89	81	74	69	83	75	69	64	65	61	57	56	52	49	47	44	42
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	41	38	35
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	37	33	30
5	68	55	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	34	30	35	30	26	30	26	23
7	58	45	37	31	53	42	34	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	33	27	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	18	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.8
10°-20°	376.0	5.1
20°-30°	562.3	7.6
30°-40°	671.4	9.1
40°-50°	702.4	9.5
50°-60°	659.2	8.9
60°-70°	550.6	7.4
70°-80°	393.7	5.3
80°-90°	236.3	3.2
90°-100°	353.3	4.8
100°-110°	684.2	9.2
110°-120°	633.9	8.6
120°-130°	488.5	6.6
130°-140°	371.5	5.0
140°-150°	267.3	3.6
150°-160°	183.8	2.5
160°-170°	107.9	1.5
170°-180°	35.1	0.5
0°-30°	1070.2	14.4
0°-40°	1741.6	23.5
0°-60°	3103.2	41.9
0°-90°	4283.8	57.8
90°-120°	1671.4	22.6
90°-150°	2798.7	37.8
90°-180°	3126.0	42.2
0°-180°	7409.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	21	103	190	243	259	16
95°	42	157	585	324	297	39
105°	97	174	704	1188	1103	103
115°	158	213	532	1107	1264	157
125°	214	252	470	844	986	190
135°	248	294	434	674	779	192
145°	281	320	410	528	586	176
155°	318	343	397	452	471	146
165°	347	357	380	403	410	98
175°	362	362	365	370	369	34
180°	363	363	363	363	363	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	21.2	102.7	189.6	243.2	259.1
92.5°	29.2	127.4	295.5	255.6	261.6
95°	41.7	156.8	585.3	323.9	297.3
97.5°	54.7	162.6	810.4	505.6	376.1
100°	67.9	164.5	827.0	843.8	651.1
102.5°	81.8	168.0	770.2	1059.6	909.2
105°	97.3	174.4	703.8	1188.2	1103.4
107.5°	111.9	183.0	644.1	1238.2	1226.4
110°	128.0	192.0	594.6	1230.9	1292.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	144.2	201.7	557.6	1178.8	1298.5
115°	158.1	213.3	531.8	1106.6	1264.4
117.5°	173.5	222.7	510.2	1030.0	1204.0
120°	188.2	232.0	494.5	957.0	1125.9
122.5°	202.1	242.2	481.8	897.7	1053.6
125°	213.7	251.5	469.9	843.8	986.5
127.5°	224.0	263.2	460.1	798.0	927.5
130°	233.6	275.0	450.3	755.2	875.8
132.5°	239.4	285.6	442.0	714.4	827.8
135°	248.2	294.0	433.7	674.2	779.1
137.5°	256.3	302.2	426.2	634.4	729.6
140°	262.9	309.5	419.4	596.6	679.5
142.5°	271.7	314.6	411.9	560.0	630.8
145°	281.2	320.4	410.4	527.8	585.7
147.5°	289.2	326.6	408.2	501.2	547.3
150°	298.8	331.8	405.2	479.8	513.2
152.5°	308.3	337.4	401.6	465.1	488.2
155°	317.9	342.8	397.2	451.5	470.6
157.5°	325.2	347.6	393.5	438.3	453.7
160°	334.0	351.6	389.1	426.2	437.5
162.5°	340.6	354.6	384.7	414.8	422.9
165°	347.2	357.2	380.3	403.4	410.4
167.5°	352.4	359.4	375.9	393.5	397.9
170°	356.8	360.4	371.5	384.7	386.9
172.5°	359.7	361.5	367.8	377.0	376.6
175°	361.9	362.3	364.9	370.0	369.3
177.5°	363.4	362.7	362.7	365.6	364.1
180°	362.7	362.7	362.7	362.7	362.7

(END OF REPORT)