

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: P1011414

Luminaire Tested: S123DIP-B1165D585UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011414
REPORT IS A COMBINATION OF REPORTS P989558 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB50-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

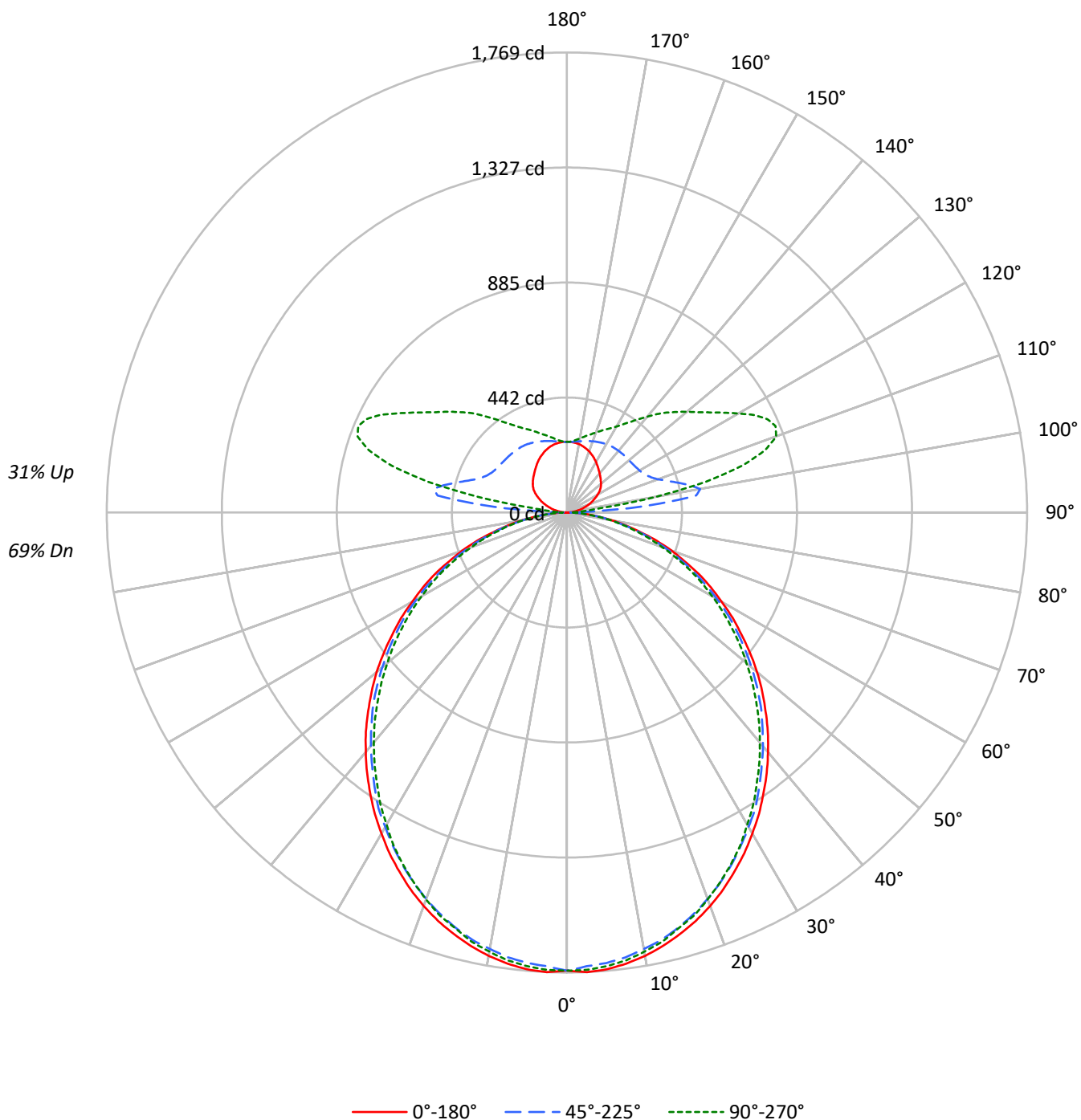
Lumens per Lamp: N/A
Luminaire Lumens: 6633.8 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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	94	94	94	83	83	83	74	74	74
1	102	98	93	90	96	92	89	85	82	80	77	73	71	69	65	64	62
2	93	85	79	73	87	81	75	70	72	68	64	64	61	58	57	55	52
3	85	75	67	61	80	71	64	59	64	58	54	57	53	49	51	47	44
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	45	41	38
5	71	59	51	45	67	56	49	43	51	44	40	46	40	36	41	37	33
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29
7	61	48	40	34	57	46	38	33	42	35	31	38	32	28	34	29	26
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	24	21
10	49	37	29	24	47	35	28	24	32	26	22	29	24	21	27	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.5
10°-20°	469.0	7.1
20°-30°	692.6	10.4
30°-40°	808.9	12.2
40°-50°	813.2	12.3
50°-60°	714.4	10.8
60°-70°	532.0	8.0
70°-80°	302.8	4.6
80°-90°	87.6	1.3
90°-100°	154.3	2.3
100°-110°	431.3	6.5
110°-120°	420.5	6.3
120°-130°	334.9	5.0
130°-140°	264.3	4.0
140°-150°	197.2	3.0
150°-160°	137.6	2.1
160°-170°	80.8	1.2
170°-180°	26.3	0.4
0°-30°	1327.7	20.0
0°-40°	2136.6	32.2
0°-60°	3664.1	55.2
0°-90°	4586.5	69.1
90°-120°	1006.1	15.2
90°-150°	1802.6	27.2
90°-180°	2047.0	30.9
0°-180°	6633.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	1	7	14	15	16	7
95°	19	61	326	95	64	20
105°	64	94	442	773	699	68
115°	113	140	338	741	850	112
125°	157	185	316	572	671	139
135°	184	219	311	471	544	142
145°	209	240	307	386	425	131
155°	238	257	297	338	352	109
165°	260	267	285	302	307	73
175°	271	271	273	277	276	26
180°	272	272	272	272	272	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	1.1	6.6	13.7	15.4	15.9
92.5°	8.2	33.0	102.2	34.9	29.1
95°	18.7	60.8	325.9	95.1	63.8
97.5°	29.7	69.5	501.3	239.1	130.8
100°	40.7	76.7	520.5	500.2	344.6
102.5°	52.2	84.9	484.8	669.8	545.8
105°	63.8	94.2	441.9	772.8	699.2
107.5°	75.9	105.2	404.0	818.2	799.2
110°	89.0	116.5	372.7	819.6	856.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.1	128.4	351.8	788.5	867.9
115°	112.7	140.4	338.0	741.2	850.3
117.5°	124.2	152.0	328.7	690.7	811.8
120°	136.3	163.6	322.7	642.8	761.3
122.5°	146.8	174.5	318.8	605.2	714.0
125°	156.7	185.0	315.5	571.7	670.6
127.5°	164.3	194.9	313.9	544.2	633.2
130°	171.5	203.6	312.2	518.9	602.4
132.5°	177.0	211.6	311.7	495.2	572.2
135°	183.6	219.0	311.1	470.8	543.6
137.5°	189.6	225.1	310.0	447.7	513.4
140°	195.7	230.6	309.5	425.2	481.5
142.5°	202.3	235.6	308.4	404.5	451.8
145°	209.4	239.9	307.3	386.2	424.9
147.5°	216.6	244.6	305.6	371.8	401.8
150°	223.7	248.4	303.4	359.2	382.0
152.5°	230.9	252.6	300.7	348.2	365.5
155°	238.0	256.6	297.4	338.0	352.3
157.5°	243.5	260.2	294.6	328.2	339.7
160°	250.1	263.2	291.3	319.1	327.6
162.5°	255.0	265.5	288.0	310.5	316.6
165°	260.0	267.4	284.7	302.0	307.3
167.5°	263.8	269.0	281.4	294.6	297.9
170°	267.1	269.8	278.1	288.0	289.7
172.5°	269.3	270.7	275.4	282.2	282.0
175°	271.0	271.2	273.2	277.0	276.5
177.5°	272.1	271.5	271.5	273.7	272.6
180°	271.5	271.5	271.5	271.5	271.5

(END OF REPORT)