

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: P1011370

Luminaire Tested: S123DIP-B1165D365UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011370
REPORT IS A COMBINATION OF REPORTS P989496 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

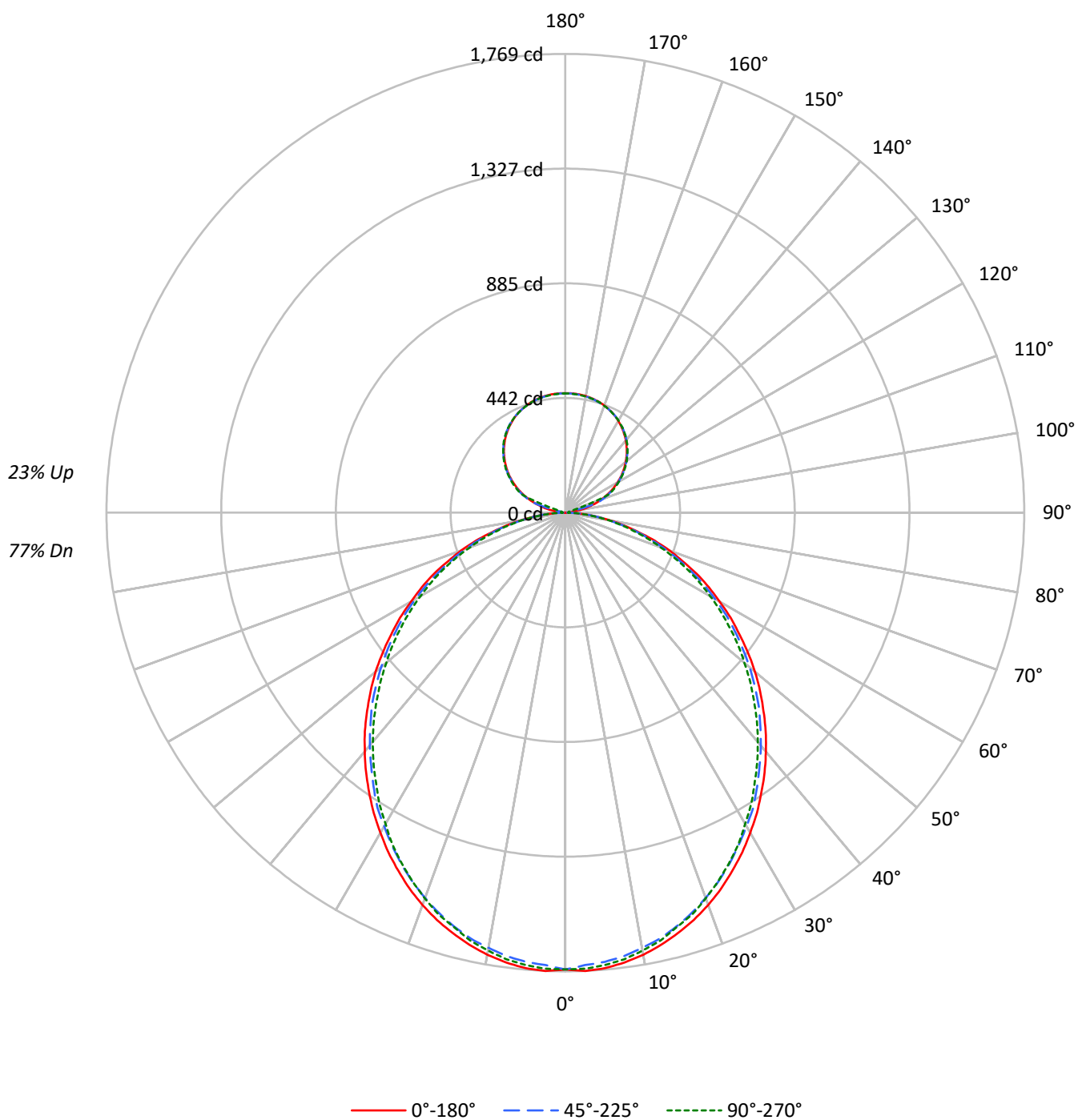
Lumens per Lamp: N/A
Luminaire Lumens: 5989.0 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	104	99	95	91	99	95	91	88	86	83	81	78	76	74	71	69	68
2	94	87	80	75	90	83	77	72	75	71	67	69	65	62	63	60	57
3	86	76	68	62	82	73	66	60	67	61	56	61	56	52	55	52	49
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	50	45	42
5	73	60	52	45	69	58	50	44	53	47	42	49	43	39	45	40	37
6	67	54	46	40	64	52	44	38	48	41	36	44	39	34	41	36	32
7	62	49	41	35	59	47	39	34	44	37	32	40	35	30	37	32	29
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26
9	54	41	33	28	51	40	32	27	37	30	26	34	28	25	31	27	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	25	21

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	2.8
10°-20°	469.0	7.8
20°-30°	692.6	11.6
30°-40°	808.9	13.5
40°-50°	813.2	13.6
50°-60°	714.4	11.9
60°-70°	532.0	8.9
70°-80°	302.8	5.1
80°-90°	87.0	1.5
90°-100°	16.2	0.3
100°-110°	78.5	1.3
110°-120°	192.3	3.2
120°-130°	244.1	4.1
130°-140°	260.8	4.4
140°-150°	243.8	4.1
150°-160°	196.7	3.3
160°-170°	126.9	2.1
170°-180°	43.7	0.7
0°-30°	1327.7	22.2
0°-40°	2136.6	35.7
0°-60°	3664.1	61.2
0°-90°	4585.9	76.6
90°-120°	287.0	4.8
90°-150°	1035.7	17.3
90°-180°	1403.0	23.4
0°-180°	5989.0	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°	0	4	8	10	10	7
95°	21	7	11	13	13	25
105°	102	106	75	14	15	108
115°	191	193	196	200	201	189
125°	269	272	274	274	275	241
135°	335	338	339	340	339	258
145°	387	390	390	391	391	242
155°	426	426	426	428	426	196
165°	450	449	448	451	449	127
175°	460	458	459	461	458	44
180°	460	460	460	460	460	

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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°	0.3	3.8	8.2	9.6	10.3
92.5°	7.9	5.8	8.9	11.3	11.6
95°	20.9	6.8	10.6	13.0	13.0
97.5°	38.0	28.4	10.9	13.7	14.0
100°	57.8	64.6	11.3	14.0	14.4
102.5°	80.4	84.8	25.3	14.0	14.7
105°	101.9	105.7	74.9	14.4	15.0
107.5°	124.8	127.9	133.0	80.4	35.6
110°	147.7	150.4	154.2	142.9	94.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.6	172.0	175.8	178.8	178.1
115°	191.1	193.2	196.3	199.7	201.1
117.5°	212.3	214.7	216.4	219.2	219.5
120°	231.8	234.9	235.9	238.7	238.7
122.5°	251.7	254.1	255.4	257.1	257.5
125°	269.4	272.2	273.5	274.2	274.9
127.5°	287.2	290.0	291.7	292.7	292.0
130°	303.6	306.4	307.7	309.1	308.4
132.5°	319.4	322.1	323.1	324.5	323.5
135°	335.4	337.5	338.9	339.9	338.9
137.5°	349.1	351.8	352.5	354.2	353.6
140°	362.8	364.8	365.9	367.2	366.6
142.5°	375.4	377.5	378.5	379.5	378.5
145°	387.1	389.5	390.1	390.8	390.8
147.5°	398.4	400.1	400.7	401.4	399.7
150°	408.6	409.6	410.3	411.0	410.0
152.5°	417.8	418.2	418.5	419.9	418.2
155°	426.4	425.7	426.0	427.8	425.7
157.5°	433.2	433.2	432.9	434.9	432.2
160°	439.4	439.0	438.7	440.7	438.4
162.5°	445.2	444.2	443.8	446.2	444.2
165°	449.6	448.6	448.3	451.0	448.6
167.5°	453.4	452.0	452.0	454.8	452.0
170°	456.5	455.1	455.1	457.8	455.1
172.5°	458.5	456.8	457.2	459.9	456.8
175°	460.2	458.5	458.9	461.3	458.5
177.5°	460.9	459.2	459.6	462.3	458.9
180°	460.2	460.2	460.2	460.2	460.2

(END OF REPORT)