

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: P1011372

Luminaire Tested: S123DIP-B1165D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011372
REPORT IS A COMBINATION OF REPORTS P989498 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-F4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

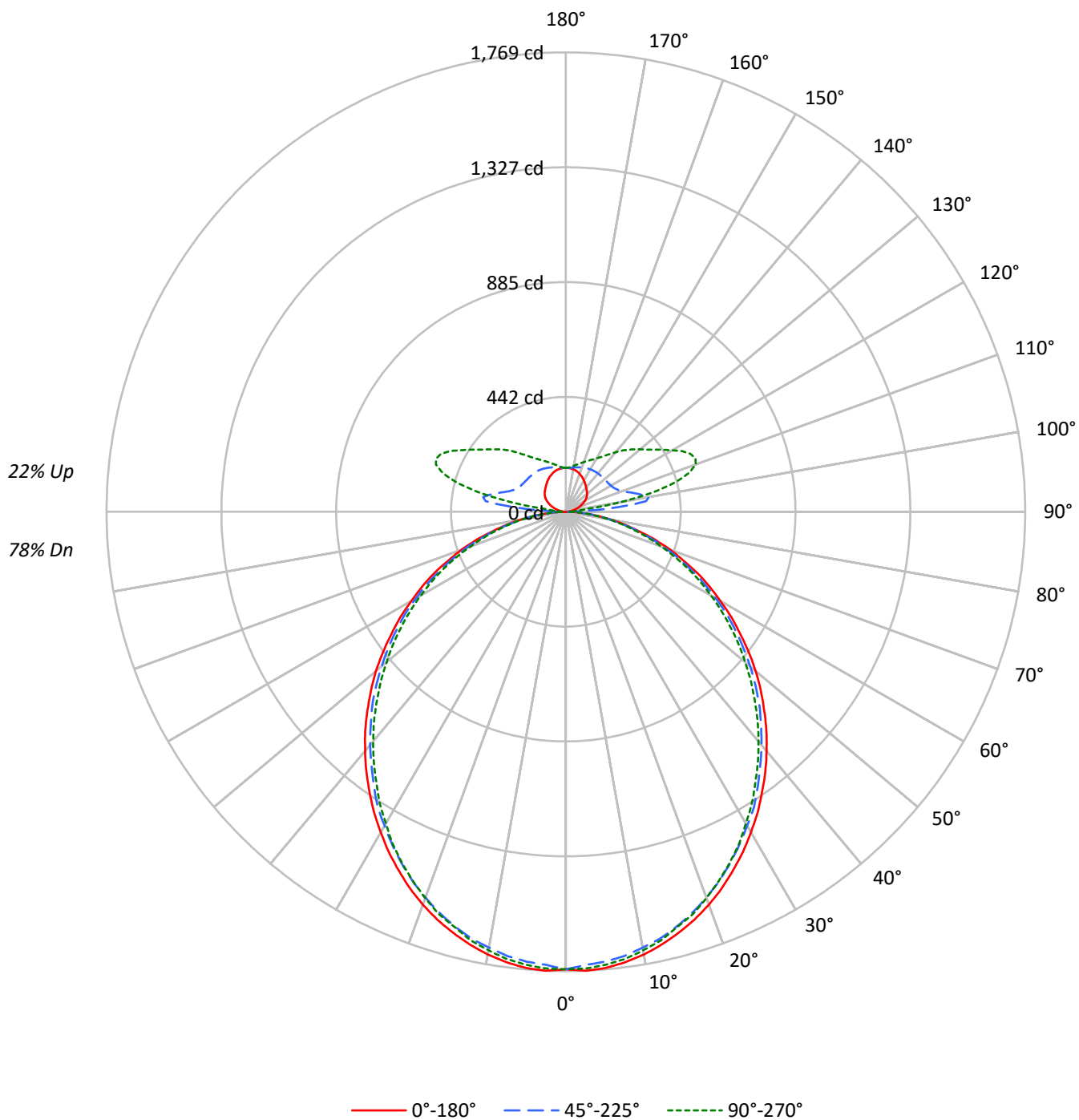
Lumens per Lamp: N/A
Luminaire Lumens: 5859.0 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	71	69
2	95	87	80	75	90	83	77	72	76	71	67	70	66	63	64	61	58
3	86	76	69	62	82	73	66	61	67	61	57	62	57	53	56	53	50
4	79	68	59	53	75	65	57	51	60	53	48	55	50	46	50	46	43
5	73	61	52	46	69	58	50	44	54	47	42	49	44	40	45	41	37
6	67	54	46	40	64	52	44	39	48	42	37	45	39	35	41	37	33
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29
8	58	45	37	31	55	43	36	30	40	34	29	37	32	28	35	30	26
9	54	41	33	28	52	40	32	27	37	31	26	34	29	25	32	27	24
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	22

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	8.0
20°-30°	692.6	11.8
30°-40°	808.9	13.8
40°-50°	813.2	13.9
50°-60°	714.4	12.2
60°-70°	532.0	9.1
70°-80°	302.8	5.2
80°-90°	87.0	1.5
90°-100°	95.9	1.6
100°-110°	268.2	4.6
110°-120°	261.5	4.5
120°-130°	208.2	3.6
130°-140°	164.4	2.8
140°-150°	122.6	2.1
150°-160°	85.5	1.5
160°-170°	50.3	0.9
170°-180°	16.3	0.3
0°-30°	1327.7	22.7
0°-40°	2136.6	36.5
0°-60°	3664.1	62.5
0°-90°	4585.9	78.3
90°-120°	625.6	10.7
90°-150°	1120.9	19.1
90°-180°	1273.0	21.7
0°-180°	5859.0	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°	1	4	8	10	10	6
95°	12	38	203	59	40	12
105°	40	59	275	481	435	42
115°	70	87	210	461	529	69
125°	97	115	196	356	417	87
135°	114	136	194	293	338	88
145°	130	149	191	240	264	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

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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°	0.7	4.1	8.5	9.6	9.9
92.5°	5.1	20.5	63.6	21.7	18.1
95°	11.6	37.8	202.7	59.2	39.6
97.5°	18.5	43.2	311.7	148.7	81.3
100°	25.3	47.6	323.7	311.0	214.3
102.5°	32.5	52.8	301.5	416.4	339.4
105°	39.6	58.6	274.8	480.6	434.8
107.5°	47.2	65.4	251.2	508.8	497.0
110°	55.4	72.4	231.7	509.6	532.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.9	79.8	218.7	490.3	539.7
115°	70.1	87.3	210.2	460.9	528.7
117.5°	77.2	94.5	204.4	429.4	504.8
120°	84.8	101.7	200.6	399.8	473.4
122.5°	91.3	108.5	198.2	376.3	444.0
125°	97.4	115.0	196.2	355.5	417.0
127.5°	102.2	121.2	195.2	338.4	393.7
130°	106.6	126.6	194.1	322.6	374.6
132.5°	110.1	131.6	193.8	308.0	355.8
135°	114.2	136.2	193.5	292.8	338.0
137.5°	117.9	140.0	192.8	278.4	319.2
140°	121.7	143.4	192.4	264.4	299.4
142.5°	125.8	146.4	191.7	251.6	281.0
145°	130.2	149.2	191.1	240.2	264.2
147.5°	134.7	152.1	190.0	231.2	249.8
150°	139.1	154.5	188.7	223.4	237.5
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)