

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: P1011371

Luminaire Tested: S123DIP-B1165D365UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011371
REPORT IS A COMBINATION OF REPORTS P989497 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-F1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

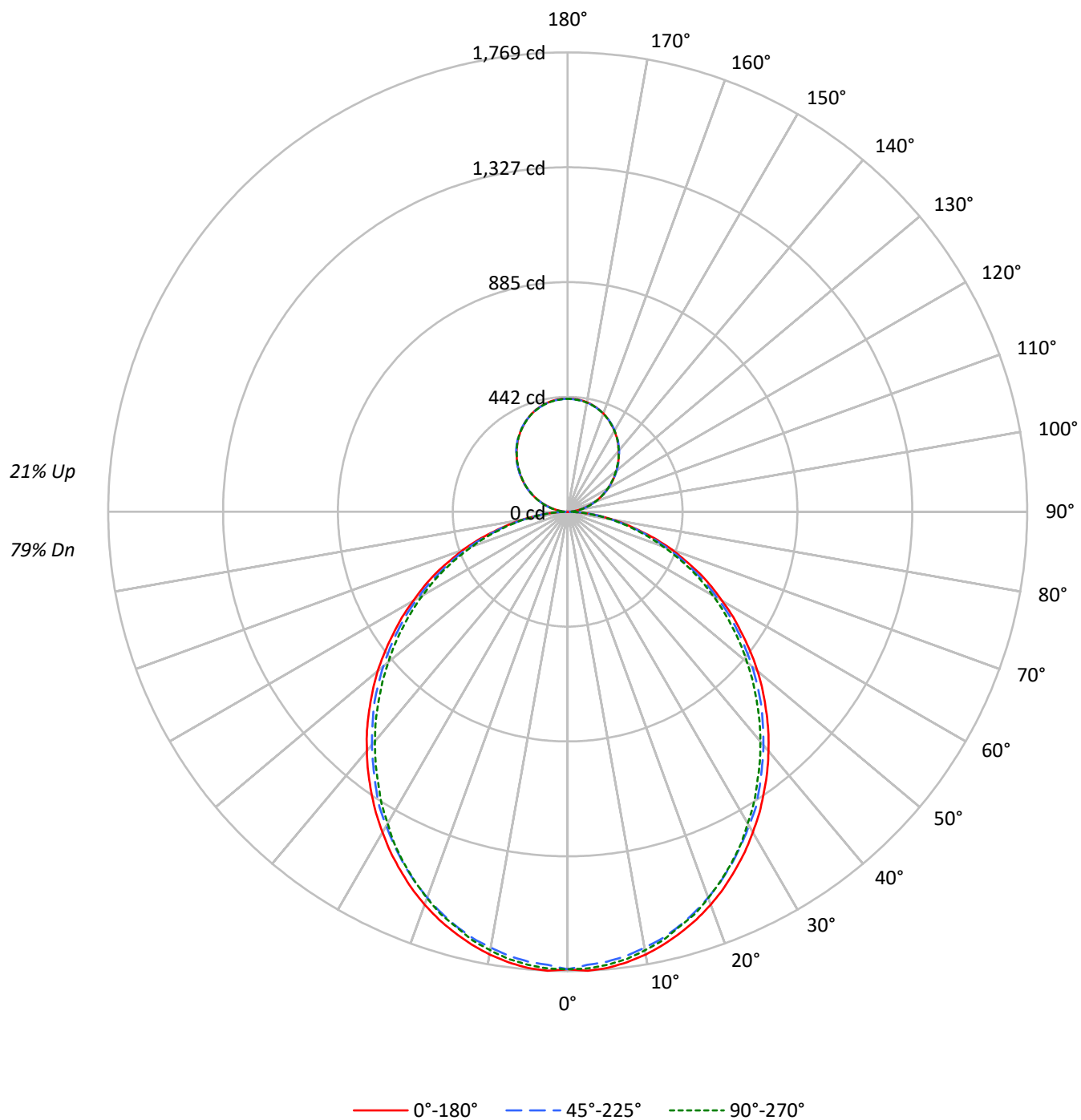
Lumens per Lamp: N/A
Luminaire Lumens: 5792.0 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	100	100	100	91	91	91	83	83	83
1	104	100	96	92	99	95	92	88	87	85	82	80	78	76	73	72	70
2	95	87	81	75	90	83	78	73	77	72	68	70	66	63	64	61	59
3	87	77	69	63	82	73	66	61	68	62	57	62	57	53	57	53	50
4	79	68	60	53	75	65	58	52	60	54	49	55	50	46	51	47	43
5	73	61	52	46	69	58	50	45	54	47	42	50	44	40	46	41	38
6	67	55	46	40	64	53	45	39	49	42	37	45	39	35	42	37	33
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	29
8	58	45	37	31	55	44	36	31	41	34	29	38	32	28	35	30	26
9	54	41	33	28	52	40	33	28	37	31	26	35	29	25	32	28	24
10	51	38	30	25	49	37	30	25	34	28	24	32	27	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	2.9
10°-20°	469.0	8.1
20°-30°	692.6	12.0
30°-40°	808.9	14.0
40°-50°	813.2	14.0
50°-60°	714.4	12.3
60°-70°	532.0	9.2
70°-80°	302.8	5.2
80°-90°	87.0	1.5
90°-100°	28.0	0.5
100°-110°	84.8	1.5
110°-120°	144.4	2.5
120°-130°	189.9	3.3
130°-140°	213.5	3.7
140°-150°	209.9	3.6
150°-160°	176.7	3.1
160°-170°	117.6	2.0
170°-180°	41.2	0.7
0°-30°	1327.7	22.9
0°-40°	2136.6	36.9
0°-60°	3664.1	63.3
0°-90°	4585.9	79.2
90°-120°	257.2	4.4
90°-150°	870.6	15.0
90°-180°	1206.0	20.8
0°-180°	5792.0	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°	20	23	25	27	27	22
105°	77	78	81	81	81	82
115°	145	146	146	146	146	144
125°	213	214	213	212	210	190
135°	276	278	278	276	276	213
145°	335	335	336	336	335	209
155°	383	383	384	385	383	176
165°	418	416	416	418	416	118
175°	434	433	433	435	432	41
180°	435	435	435	435	435	

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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°	10.3	12.3	14.4	15.4	14.7
95°	20.2	22.6	25.3	26.7	26.7
97.5°	33.2	34.9	36.9	38.6	38.3
100°	46.5	48.6	50.3	51.3	52.0
102.5°	61.9	62.9	65.3	66.3	66.0
105°	76.9	77.6	80.7	80.7	81.4
107.5°	94.7	95.1	96.4	97.5	97.1
110°	111.1	111.8	112.5	113.9	113.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128.2	128.6	128.6	130.3	130.3
115°	145.3	146.3	145.7	146.0	145.7
117.5°	162.8	163.1	162.4	162.4	161.4
120°	178.8	180.9	179.2	178.8	178.1
122.5°	195.6	197.0	196.3	195.2	194.2
125°	212.7	213.7	213.0	211.7	210.3
127.5°	228.4	230.5	229.8	227.7	226.4
130°	244.1	246.9	245.8	244.5	242.1
132.5°	259.9	262.6	261.9	260.2	258.5
135°	275.9	278.0	277.6	276.3	275.6
137.5°	290.6	292.4	293.4	291.7	290.6
140°	306.0	307.7	308.1	307.7	305.3
142.5°	320.0	321.8	322.4	322.1	320.4
145°	334.8	335.4	336.5	336.1	334.8
147.5°	347.4	348.8	349.8	349.8	347.7
150°	360.7	361.4	362.1	362.1	360.1
152.5°	371.7	372.7	373.0	373.7	372.0
155°	383.3	383.3	383.6	385.0	382.6
157.5°	393.2	392.9	393.2	394.6	392.5
160°	402.5	401.8	401.8	403.5	402.1
162.5°	410.7	409.6	410.0	411.7	409.3
165°	417.5	416.5	416.5	418.5	416.1
167.5°	423.3	421.9	422.3	424.3	422.3
170°	428.1	426.7	426.7	429.1	426.7
172.5°	431.9	430.5	430.5	432.5	430.2
175°	434.3	432.9	432.9	434.9	432.5
177.5°	435.6	434.3	434.3	436.3	433.9
180°	435.3	435.3	435.3	435.3	435.3

(END OF REPORT)