

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: P1011454

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011454
REPORT IS A COMBINATION OF REPORTS P989616 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-F
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

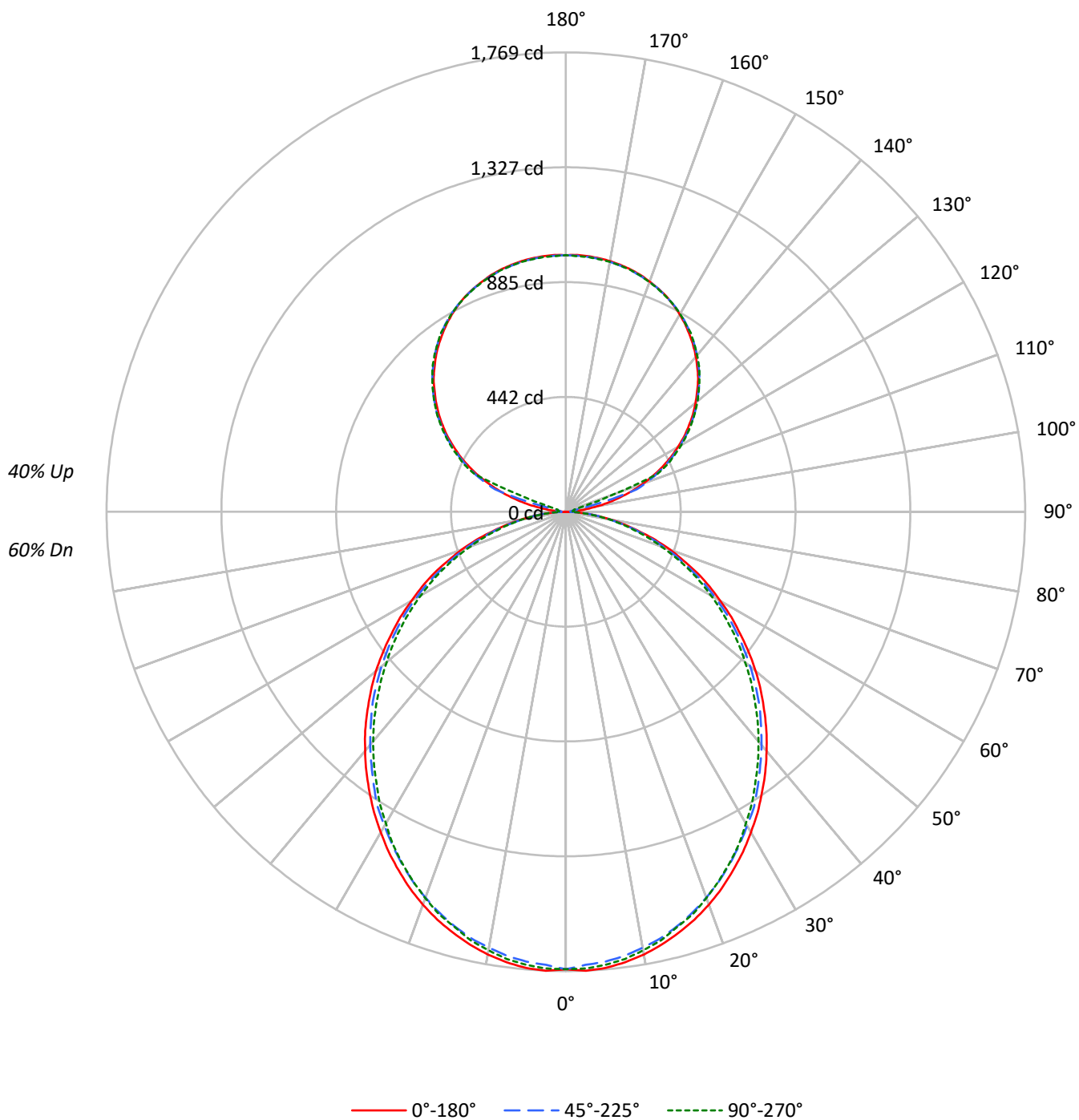
Lumens per Lamp: N/A
Luminaire Lumens: 7600.0 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	55
2	91	83	77	72	85	78	73	68	68	64	61	59	56	53	51	49	47
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34
5	70	58	50	43	65	54	47	41	48	42	37	42	37	34	36	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

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	2.2
10°-20°	469.0	6.2
20°-30°	692.6	9.1
30°-40°	808.9	10.6
40°-50°	813.2	10.7
50°-60°	714.4	9.4
60°-70°	532.0	7.0
70°-80°	302.8	4.0
80°-90°	88.0	1.2
90°-100°	34.9	0.5
100°-110°	168.5	2.2
110°-120°	412.9	5.4
120°-130°	524.2	6.9
130°-140°	560.0	7.4
140°-150°	523.6	6.9
150°-160°	422.4	5.6
160°-170°	272.6	3.6
170°-180°	93.9	1.2
0°-30°	1327.7	17.5
0°-40°	2136.6	28.1
0°-60°	3664.1	48.2
0°-90°	4587.0	60.4
90°-120°	616.3	8.1
90°-150°	2224.1	29.3
90°-180°	3013.0	39.6
0°-180°	7600.0	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	8	18	21	22	8
95°	45	15	23	28	28	54
105°	219	227	161	31	32	232
115°	410	415	422	429	432	405
125°	579	584	587	589	590	517
135°	720	725	728	730	728	555
145°	831	836	838	839	839	520
155°	916	914	915	919	914	422
165°	966	963	963	968	963	273
175°	988	985	985	990	985	94
180°	988	988	988	988	988	

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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	8.1	17.6	20.6	22.0
92.5°	16.9	12.5	19.1	24.2	25.0
95°	44.8	14.7	22.8	27.9	27.9
97.5°	81.5	60.9	23.5	29.4	30.1
100°	124.1	138.8	24.2	30.1	30.8
102.5°	172.6	182.1	54.3	30.1	31.6
105°	218.8	226.9	160.8	30.8	32.3
107.5°	268.0	274.6	285.6	172.6	76.4
110°	317.2	323.1	331.2	306.9	201.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.2	369.3	377.4	384.0	382.6
115°	410.5	414.9	421.5	428.8	431.8
117.5°	456.0	461.1	464.8	470.7	471.4
120°	497.8	504.4	506.7	512.5	512.5
122.5°	540.4	545.6	548.5	552.2	552.9
125°	578.6	584.5	587.4	588.9	590.4
127.5°	616.8	622.7	626.3	628.5	627.1
130°	652.0	657.9	660.8	663.8	662.3
132.5°	685.8	691.7	693.9	696.8	694.6
135°	720.3	724.7	727.7	729.9	727.7
137.5°	749.7	755.6	757.0	760.7	759.2
140°	779.1	783.5	785.7	788.6	787.1
142.5°	806.2	810.6	812.8	815.0	812.8
145°	831.2	836.3	837.8	839.3	839.3
147.5°	855.4	859.1	860.6	862.0	858.4
150°	877.5	879.7	881.1	882.6	880.4
152.5°	897.3	898.0	898.8	901.7	898.0
155°	915.6	914.2	914.9	918.6	914.2
157.5°	930.3	930.3	929.6	934.0	928.1
160°	943.5	942.8	942.1	946.5	941.3
162.5°	956.0	953.8	953.1	958.2	953.8
165°	965.6	963.4	962.6	968.5	963.4
167.5°	973.7	970.7	970.7	976.6	970.7
170°	980.3	977.3	977.3	983.2	977.3
172.5°	984.7	981.0	981.7	987.6	981.0
175°	988.3	984.7	985.4	990.5	984.7
177.5°	989.8	986.1	986.9	992.7	985.4
180°	988.3	988.3	988.3	988.3	988.3

(END OF REPORT)