

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: P1011418

Luminaire Tested: S123DIP-B1165D805UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011418
REPORT IS A COMBINATION OF REPORTS P989562 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB27-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

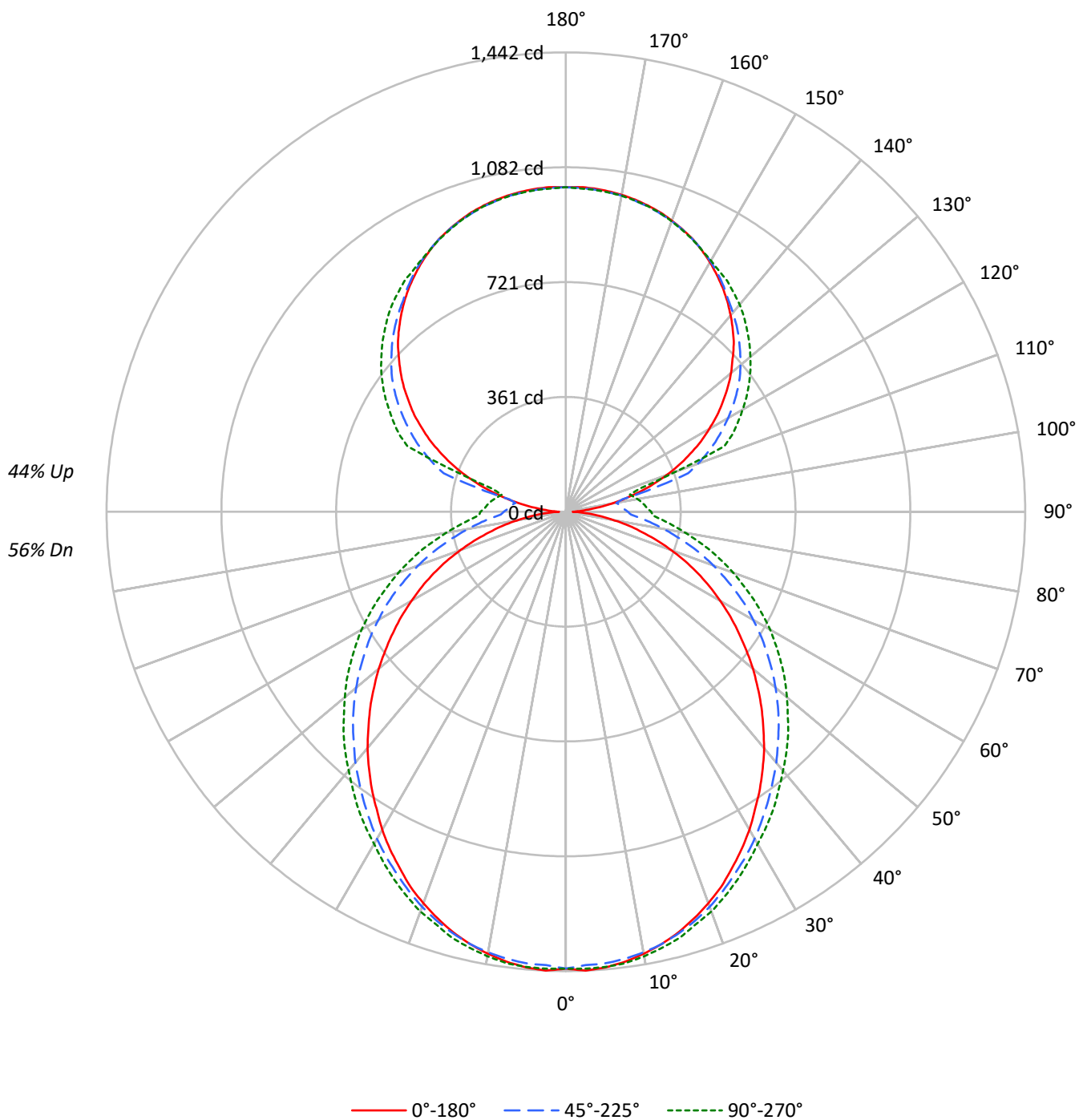
Lumens per Lamp: N/A
Luminaire Lumens: 7927.0 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61
1	98	93	89	85	91	86	83	79	74	71	69	63	61	59	52	51	50
2	89	81	74	68	82	75	69	64	64	60	56	55	51	48	45	43	41
3	81	70	63	56	74	66	59	53	56	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	47	40	62	52	44	38	44	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	22	20
8	53	40	32	27	49	38	31	26	33	27	23	28	24	20	24	20	17
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	18	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15434	15434	15434
5°	15477	14982	14969
10°	15332	14576	14464
15°	15129	14128	13929
20°	14841	13628	13354
25°	14487	13066	12758
30°	14123	12556	12160
35°	13716	12022	11673
40°	13328	11534	11158
45°	12898	11061	10734
50°	12471	10593	10273
55°	12000	10112	9850
60°	11539	9621	9416
65°	11064	9096	8908
70°	10348	8509	8384
75°	9449	7839	7845
80°	8393	7161	7228
85°	7348	6611	6785

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12898 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	1.7
10°-20°	387.8	4.9
20°-30°	579.9	7.3
30°-40°	692.3	8.7
40°-50°	724.4	9.1
50°-60°	679.8	8.6
60°-70°	567.8	7.2
70°-80°	406.0	5.1
80°-90°	243.6	3.1
90°-100°	187.7	2.4
100°-110°	285.3	3.6
110°-120°	500.2	6.3
120°-130°	582.9	7.4
130°-140°	596.3	7.5
140°-150°	543.8	6.9
150°-160°	435.4	5.5
160°-170°	281.0	3.5
170°-180°	96.8	1.2
0°-30°	1103.7	13.9
0°-40°	1796.0	22.7
0°-60°	3200.1	40.4
0°-90°	4417.6	55.7
90°-120°	973.2	12.3
90°-150°	2696.2	34.0
90°-180°	3509.0	44.3
0°-180°	7927.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1436	1432	1423	1436	1434	136
15°	1367	1371	1370	1386	1384	385
25°	1234	1250	1254	1275	1275	569
35°	1062	1087	1107	1131	1137	664
45°	868	906	945	975	987	670
55°	662	714	770	812	825	593
65°	458	519	587	634	650	452
75°	248	322	400	451	470	265
85°	76	155	237	290	306	79
90°	21	105	195	251	268	17
95°	63	93	178	232	248	69
105°	238	284	283	193	208	252
115°	431	454	517	562	578	426
125°	601	607	656	690	702	538
135°	746	749	769	799	805	574
145°	858	862	864	878	884	537
155°	944	942	943	947	942	435
165°	995	993	992	998	993	281
175°	1019	1015	1016	1021	1015	97
180°	1019	1019	1019	1019	1019	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.9	1433.9	1433.9	1433.9	1433.9
2.5°	1441.7	1437.0	1424.5	1437.0	1435.5
5°	1435.5	1432.3	1423.0	1435.5	1433.9
7.5°	1424.5	1424.5	1415.1	1430.8	1429.2
10°	1408.9	1412.0	1404.2	1419.8	1416.7
12.5°	1390.2	1394.8	1390.2	1404.2	1401.1
15°	1366.7	1371.4	1369.9	1385.5	1383.9
17.5°	1338.6	1348.0	1346.4	1360.5	1357.4
20°	1307.4	1316.7	1319.9	1333.9	1335.5
22.5°	1274.6	1283.9	1288.6	1307.4	1305.8
25°	1234.0	1249.6	1254.3	1274.6	1274.6
27.5°	1194.9	1212.1	1221.5	1238.6	1240.2
30°	1152.7	1173.0	1185.5	1204.3	1204.3
32.5°	1105.9	1129.3	1146.5	1166.8	1171.5
35°	1062.1	1087.1	1107.4	1130.9	1137.1
37.5°	1015.3	1043.4	1066.8	1093.4	1098.1
40°	968.4	996.5	1027.8	1054.3	1060.6
42.5°	916.9	952.8	985.6	1015.3	1024.7
45°	868.5	905.9	945.0	974.7	987.2
47.5°	816.9	859.1	902.8	935.6	945.0
50°	766.9	810.7	859.1	895.0	905.9
52.5°	713.8	760.7	815.4	852.8	866.9
55°	662.3	713.8	770.1	812.2	824.7
57.5°	612.3	665.4	726.3	768.5	782.5
60°	559.2	615.4	679.5	723.2	740.4
62.5°	509.2	567.0	635.7	679.5	695.1
65°	457.7	518.6	587.3	634.2	649.8
67.5°	406.1	470.2	538.9	590.4	602.9
70°	351.4	418.6	493.6	543.6	559.2
72.5°	301.5	368.6	446.7	498.3	513.9
75°	248.4	321.8	399.9	451.4	470.2
77.5°	203.1	276.5	354.6	409.2	423.3
80°	154.6	231.2	312.4	365.5	381.1
82.5°	112.5	190.6	273.3	326.5	342.1
85°	76.5	154.6	237.4	290.5	306.1
87.5°	46.9	125.0	204.6	257.7	273.3
90°	21.1	105.1	194.7	250.8	267.9
92.5°	36.1	98.8	183.7	240.6	255.3
95°	63.4	93.2	178.1	231.9	247.5
97.5°	99.6	134.7	169.5	222.4	238.7
100°	142.0	207.1	160.9	212.2	228.6
102.5°	190.4	243.9	182.5	201.3	218.4
105°	238.1	283.9	282.9	192.7	208.2
107.5°	287.2	326.8	402.2	327.8	242.7
110°	336.4	370.5	441.4	457.0	361.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.8	411.9	479.7	525.5	538.1
115°	430.9	454.3	517.3	562.3	577.9
117.5°	477.9	495.6	552.5	596.1	609.3
120°	519.4	534.1	587.9	629.8	640.8
122.5°	563.3	571.8	623.2	661.4	673.1
125°	601.2	607.2	655.5	689.9	702.3
127.5°	640.5	645.0	687.9	721.3	730.7
130°	676.9	681.3	715.6	748.3	756.1
132.5°	710.1	716.1	741.9	773.0	781.7
135°	745.6	748.7	768.8	799.3	804.8
137.5°	775.9	780.5	792.9	821.7	828.0
140°	804.7	809.2	816.1	842.6	848.9
142.5°	832.7	835.6	837.9	860.5	866.0
145°	858.4	862.1	863.7	877.7	883.9
147.5°	881.8	885.6	887.1	893.3	895.7
150°	904.5	906.8	908.3	909.8	910.7
152.5°	925.0	925.7	926.5	929.5	925.7
155°	943.9	942.4	943.1	946.9	942.4
157.5°	959.0	959.0	958.3	962.8	956.8
160°	972.6	971.9	971.1	975.7	970.4
162.5°	985.5	983.2	982.5	987.8	983.2
165°	995.4	993.1	992.3	998.4	993.1
167.5°	1003.7	1000.7	1000.7	1006.7	1000.7
170°	1010.5	1007.5	1007.5	1013.5	1007.5
172.5°	1015.0	1011.3	1012.0	1018.1	1011.3
175°	1018.8	1015.0	1015.8	1021.1	1015.0
177.5°	1020.3	1016.6	1017.3	1023.4	1015.8
180°	1018.8	1018.8	1018.8	1018.8	1018.8

(END OF REPORT)