

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: P1011245

Luminaire Tested: S123DIP-B1165D1025UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011245
REPORT IS A COMBINATION OF REPORTS P989326 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

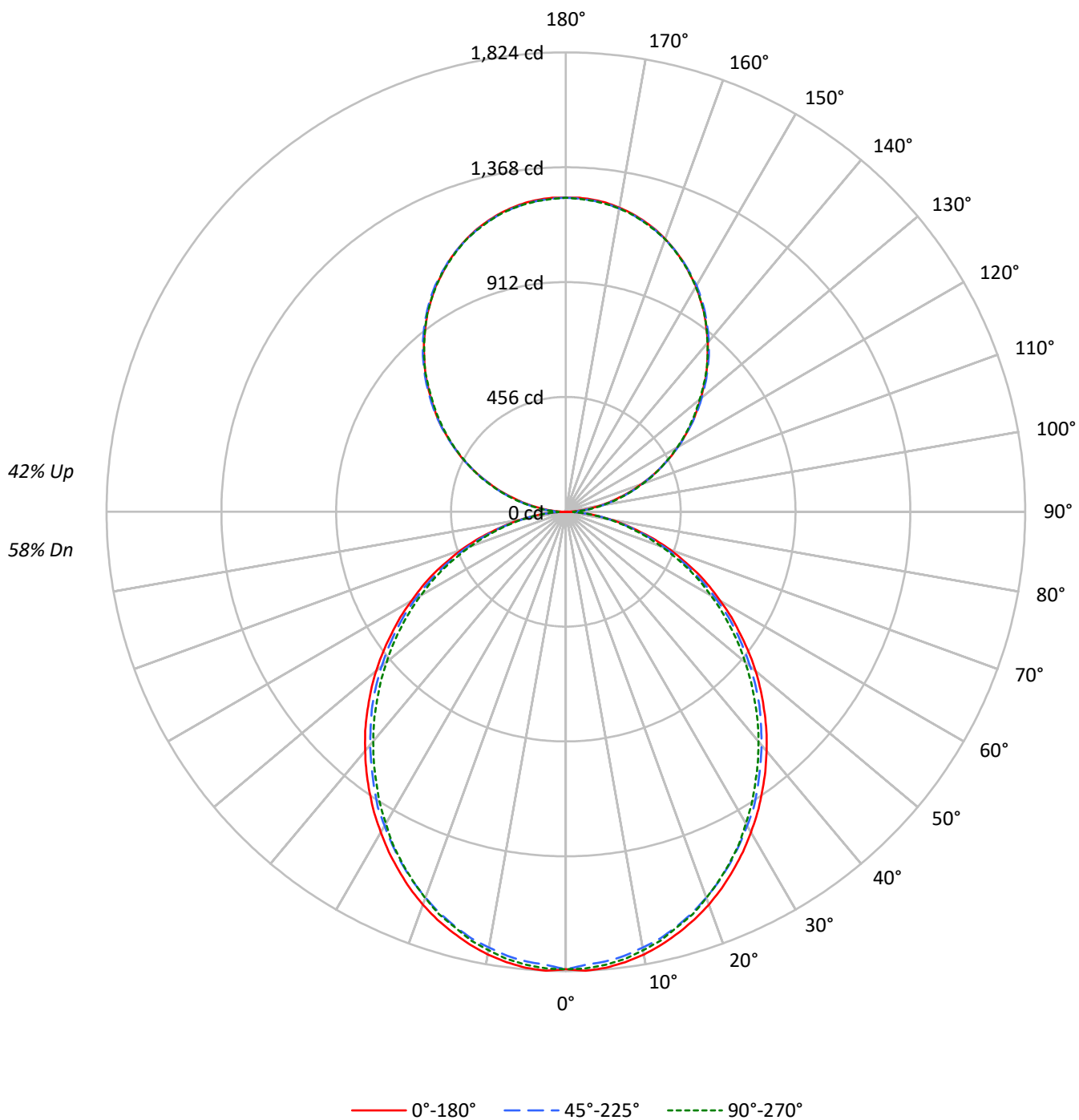
Lumens per Lamp: N/A
Luminaire Lumens: 8185.0 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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	102	102	102	102	88	88	88	75	75	75	63	63	63
1	99	95	91	88	93	89	85	82	77	74	72	66	64	62	56	55	53
2	91	83	77	71	84	78	72	67	67	63	60	58	55	52	49	47	45
3	83	73	65	60	77	68	62	56	59	54	50	51	47	44	43	41	38
4	76	65	57	50	70	60	53	48	53	47	43	46	41	38	39	36	33
5	69	58	49	43	64	54	47	41	47	41	37	41	36	33	35	31	29
6	64	52	43	37	59	49	41	36	43	37	32	37	32	29	32	28	25
7	59	47	39	33	55	44	37	31	39	33	28	34	29	25	29	25	22
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19550	19550	19550
5°	19600	18876	18848
10°	19425	18237	18050
15°	19155	17572	17181
20°	18845	16834	16318
25°	18444	16057	15398
30°	18006	15251	14429
35°	17547	14428	13467
40°	17066	13565	12519
45°	16537	12723	11530
50°	15999	11785	10537
55°	15309	10807	9531
60°	14599	9730	8461
65°	13931	8563	7344
70°	12969	7269	6041
75°	11583	5755	4690
80°	10006	4046	3317
85°	7800	2175	1662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16537 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.1
10°-20°	483.5	5.9
20°-30°	714.1	8.7
30°-40°	834.0	10.2
40°-50°	838.4	10.2
50°-60°	736.5	9.0
60°-70°	548.5	6.7
70°-80°	312.1	3.8
80°-90°	91.4	1.1
90°-100°	80.3	1.0
100°-110°	243.0	3.0
110°-120°	413.6	5.1
120°-130°	544.2	6.6
130°-140°	611.7	7.5
140°-150°	601.3	7.3
150°-160°	506.3	6.2
160°-170°	337.0	4.1
170°-180°	118.0	1.4
0°-30°	1368.8	16.7
0°-40°	2202.7	26.9
0°-60°	3777.6	46.2
0°-90°	4729.7	57.8
90°-120°	736.9	9.0
90°-150°	2494.0	30.5
90°-180°	3455.0	42.2
0°-180°	8185.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1818	1810	1793	1808	1805	172
15°	1730	1724	1704	1716	1707	488
25°	1571	1562	1541	1543	1538	724
35°	1359	1349	1329	1320	1312	850
45°	1114	1107	1087	1068	1060	860
55°	845	843	823	806	798	757
65°	576	568	553	540	536	569
75°	304	298	294	286	281	325
85°	81	78	78	75	75	87
90°	1	11	24	27	29	10
95°	58	65	72	76	76	64
105°	220	222	231	231	233	236
115°	416	419	417	418	417	412
125°	609	612	610	606	602	543
135°	791	796	796	792	790	609
145°	959	961	964	963	959	599
155°	1098	1098	1099	1103	1096	506
165°	1196	1193	1193	1199	1192	337
175°	1244	1240	1240	1246	1239	118
180°	1247	1247	1247	1247	1247	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.3	1816.3	1816.3	1816.3	1816.3
2.5°	1824.1	1817.9	1800.7	1816.3	1814.7
5°	1817.9	1810.0	1792.9	1808.5	1805.4
7.5°	1803.8	1796.0	1778.8	1792.9	1791.3
10°	1785.1	1777.2	1756.9	1771.0	1767.9
12.5°	1760.1	1753.8	1735.1	1744.5	1742.9
15°	1730.4	1724.1	1703.8	1716.3	1707.0
17.5°	1697.6	1689.8	1669.5	1678.9	1675.7
20°	1660.1	1650.7	1630.4	1636.7	1632.0
22.5°	1618.0	1608.6	1588.3	1593.0	1586.7
25°	1571.1	1561.7	1541.4	1543.0	1538.3
27.5°	1522.7	1513.3	1491.5	1493.0	1488.3
30°	1469.6	1461.8	1439.9	1439.9	1429.0
32.5°	1416.5	1405.6	1389.9	1379.0	1374.3
35°	1358.7	1349.3	1329.0	1319.7	1311.9
37.5°	1300.9	1288.4	1268.1	1257.2	1252.5
40°	1240.0	1230.6	1208.8	1196.3	1190.0
42.5°	1179.1	1168.2	1146.3	1133.8	1127.6
45°	1113.5	1107.3	1087.0	1068.2	1060.4
47.5°	1049.5	1040.1	1021.4	1002.6	996.4
50°	983.9	976.1	955.8	938.6	929.2
52.5°	915.2	910.5	888.6	874.6	865.2
55°	844.9	843.3	823.0	805.9	798.0
57.5°	779.3	773.1	757.4	741.8	732.5
60°	707.5	705.9	687.2	673.1	665.3
62.5°	643.4	638.7	620.0	606.0	601.3
65°	576.3	568.5	552.9	540.4	535.7
67.5°	504.4	498.2	485.7	474.8	468.5
70°	440.4	431.0	421.7	410.7	402.9
72.5°	373.3	367.0	356.1	346.7	343.6
75°	304.5	298.3	293.6	285.8	281.1
77.5°	243.6	240.5	234.3	228.0	228.0
80°	184.3	179.6	176.5	174.9	174.9
82.5°	126.5	126.5	126.5	123.4	121.8
85°	81.2	78.1	78.1	75.0	75.0
87.5°	40.6	35.9	34.4	32.8	32.8
90°	1.0	10.8	23.5	27.4	29.4
92.5°	29.4	35.3	41.1	44.1	42.1
95°	57.8	64.7	72.5	76.4	76.4
97.5°	95.0	99.9	105.8	110.7	109.7
100°	133.2	139.1	144.0	146.9	148.9
102.5°	177.3	180.2	187.1	190.0	189.1
105°	220.4	222.4	231.2	231.2	233.1
107.5°	271.4	272.3	276.3	279.2	278.2
110°	318.4	320.3	322.3	326.2	324.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	367.4	368.3	368.3	373.2	373.2
115°	416.3	419.3	417.3	418.3	417.3
117.5°	466.3	467.3	465.3	465.3	462.4
120°	512.3	518.2	513.3	512.3	510.4
122.5°	560.3	564.3	562.3	559.4	556.4
125°	609.3	612.3	610.3	606.4	602.5
127.5°	654.4	660.3	658.3	652.4	648.5
130°	699.4	707.3	704.3	700.4	693.6
132.5°	744.5	752.3	750.4	745.5	740.6
135°	790.6	796.4	795.5	791.5	789.6
137.5°	832.7	837.6	840.5	835.6	832.7
140°	876.8	881.7	882.6	881.7	874.8
142.5°	916.9	921.8	923.8	922.8	917.9
145°	959.0	961.0	963.9	963.0	959.0
147.5°	995.3	999.2	1002.2	1002.2	996.3
150°	1033.5	1035.5	1037.4	1037.4	1031.5
152.5°	1064.8	1067.8	1068.8	1070.7	1065.8
155°	1098.2	1098.2	1099.1	1103.1	1096.2
157.5°	1126.6	1125.6	1126.6	1130.5	1124.6
160°	1153.0	1151.1	1151.1	1156.0	1152.0
162.5°	1176.5	1173.6	1174.6	1179.5	1172.6
165°	1196.1	1193.2	1193.2	1199.1	1192.2
167.5°	1212.8	1208.9	1209.8	1215.7	1209.8
170°	1226.5	1222.6	1222.6	1229.4	1222.6
172.5°	1237.3	1233.3	1233.3	1239.2	1232.4
175°	1244.1	1240.2	1240.2	1246.1	1239.2
177.5°	1248.0	1244.1	1244.1	1250.0	1243.1
180°	1247.1	1247.1	1247.1	1247.1	1247.1

(END OF REPORT)