

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: P1011272

Luminaire Tested: S123DIP-B1165D1025UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011272
REPORT IS A COMBINATION OF REPORTS P989368 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

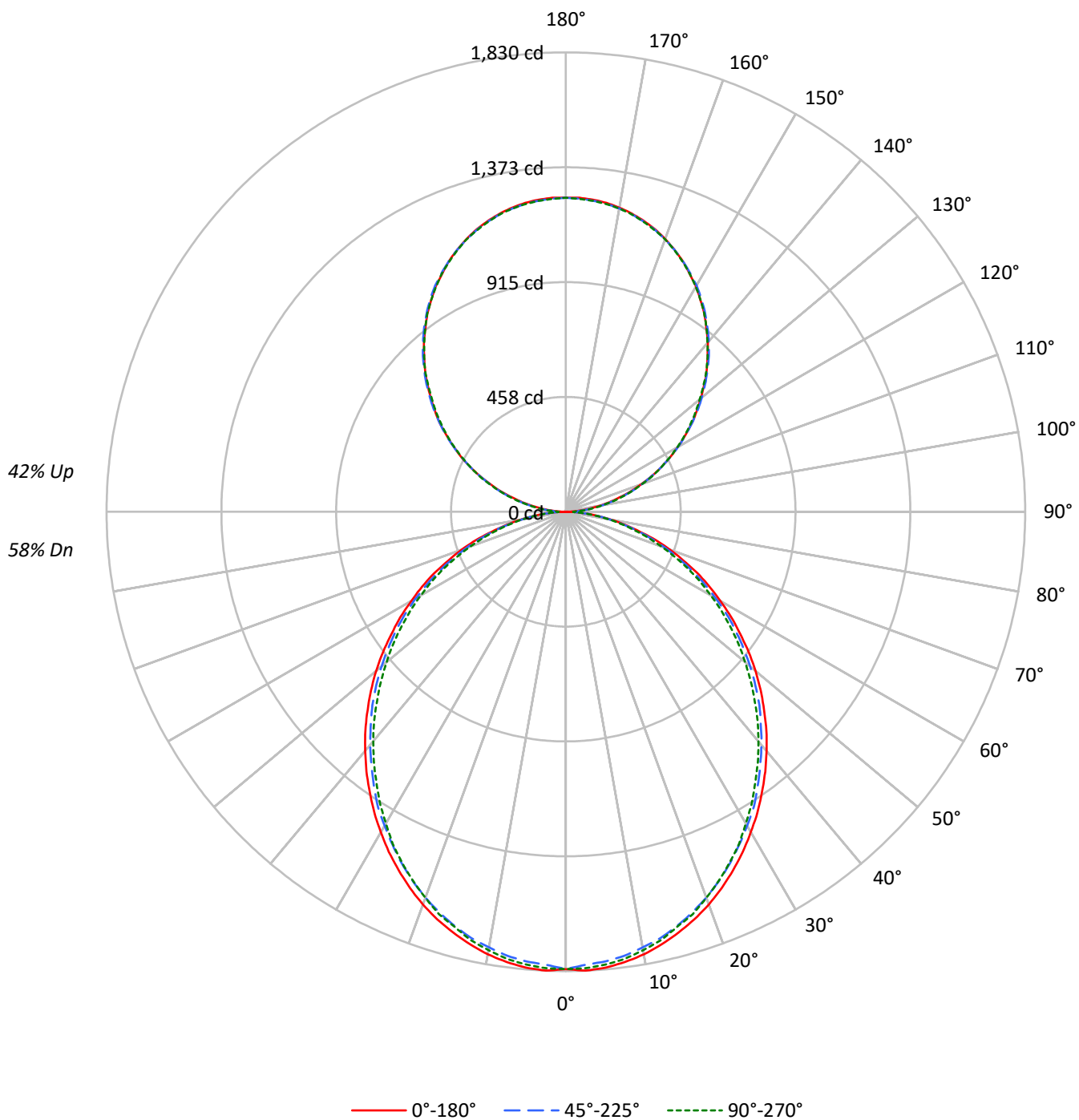
Lumens per Lamp: N/A
Luminaire Lumens: 8210.0 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	59	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°	19609	19609	19609
5°	19657	18932	18903
10°	19482	18290	18103
15°	19211	17624	17231
20°	18900	16885	16366
25°	18500	16105	15444
30°	18059	15296	14471
35°	17598	14471	13506
40°	17117	13605	12557
45°	16586	12761	11565
50°	16047	11819	10569
55°	15354	10839	9560
60°	14642	9758	8486
65°	13972	8588	7366
70°	13008	7290	6059
75°	11617	5773	4703
80°	10033	4057	3326
85°	7828	2180	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16586 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	2.1
10°-20°	484.9	5.9
20°-30°	716.2	8.7
30°-40°	836.4	10.2
40°-50°	840.9	10.2
50°-60°	738.7	9.0
60°-70°	550.1	6.7
70°-80°	313.1	3.8
80°-90°	91.6	1.1
90°-100°	80.5	1.0
100°-110°	243.7	3.0
110°-120°	415.0	5.1
120°-130°	545.9	6.6
130°-140°	613.6	7.5
140°-150°	603.2	7.3
150°-160°	507.9	6.2
160°-170°	338.1	4.1
170°-180°	118.4	1.4
0°-30°	1372.8	16.7
0°-40°	2209.3	26.9
0°-60°	3788.8	46.1
0°-90°	4743.6	57.8
90°-120°	739.2	9.0
90°-150°	2502.0	30.5
90°-180°	3466.0	42.2
0°-180°	8210.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1823	1815	1798	1814	1811	173
15°	1736	1729	1709	1721	1712	489
25°	1576	1566	1546	1548	1543	726
35°	1363	1353	1333	1324	1316	853
45°	1117	1110	1090	1071	1064	862
55°	847	846	826	808	800	759
65°	578	570	554	542	537	570
75°	305	299	294	287	282	326
85°	82	78	78	75	75	87
90°	1	11	24	28	30	10
95°	58	65	73	77	77	64
105°	221	223	232	232	234	237
115°	418	421	419	420	419	413
125°	611	614	612	608	604	545
135°	793	799	798	794	792	611
145°	962	964	967	966	962	601
155°	1102	1102	1103	1107	1100	507
165°	1200	1197	1197	1203	1196	338
175°	1248	1244	1244	1250	1243	119
180°	1251	1251	1251	1251	1251	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.7	1821.7	1821.7	1821.7	1821.7
2.5°	1829.5	1823.2	1806.0	1821.7	1820.1
5°	1823.2	1815.4	1798.2	1813.8	1810.7
7.5°	1809.1	1801.3	1784.1	1798.2	1796.6
10°	1790.3	1782.5	1762.1	1776.2	1773.1
12.5°	1765.3	1759.0	1740.2	1749.6	1748.1
15°	1735.5	1729.3	1708.9	1721.4	1712.0
17.5°	1702.6	1694.8	1674.4	1683.8	1680.7
20°	1665.0	1655.6	1635.3	1641.5	1636.8
22.5°	1622.7	1613.3	1593.0	1597.7	1591.4
25°	1575.8	1566.4	1546.0	1547.6	1542.9
27.5°	1527.2	1517.8	1495.9	1497.4	1492.7
30°	1473.9	1466.1	1444.2	1444.2	1433.2
32.5°	1420.7	1409.7	1394.1	1383.1	1378.4
35°	1362.7	1353.3	1333.0	1323.6	1315.7
37.5°	1304.8	1292.2	1271.9	1260.9	1256.2
40°	1243.7	1234.3	1212.4	1199.8	1193.6
42.5°	1182.6	1171.6	1149.7	1137.2	1130.9
45°	1116.8	1110.5	1090.2	1071.4	1063.6
47.5°	1052.6	1043.2	1024.4	1005.6	999.3
50°	986.8	979.0	958.6	941.4	932.0
52.5°	917.9	913.2	891.3	877.2	867.8
55°	847.4	845.8	825.5	808.2	800.4
57.5°	781.6	775.3	759.7	744.0	734.6
60°	709.6	708.0	689.2	675.1	667.3
62.5°	645.3	640.6	621.8	607.7	603.0
65°	578.0	570.2	554.5	542.0	537.3
67.5°	505.9	499.7	487.1	476.2	469.9
70°	441.7	432.3	422.9	412.0	404.1
72.5°	374.4	368.1	357.1	347.7	344.6
75°	305.4	299.2	294.5	286.6	281.9
77.5°	244.4	241.2	235.0	228.7	228.7
80°	184.8	180.1	177.0	175.4	175.4
82.5°	126.9	126.9	126.9	123.7	122.2
85°	81.5	78.3	78.3	75.2	75.2
87.5°	40.7	36.0	34.5	32.9	32.9
90°	1.0	10.8	23.6	27.5	29.5
92.5°	29.5	35.4	41.3	44.2	42.3
95°	58.0	64.9	72.7	76.7	76.7
97.5°	95.3	100.2	106.1	111.0	110.1
100°	133.7	139.5	144.5	147.4	149.4
102.5°	177.9	180.8	187.7	190.7	189.7
105°	221.1	223.1	231.9	231.9	233.9
107.5°	272.2	273.2	277.1	280.1	279.1
110°	319.4	321.4	323.3	327.3	325.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	368.5	369.5	369.5	374.4	374.4
115°	417.7	420.6	418.6	419.6	418.6
117.5°	467.8	468.8	466.8	466.8	463.9
120°	514.0	519.9	515.0	514.0	512.0
122.5°	562.1	566.1	564.1	561.1	558.2
125°	611.3	614.2	612.2	608.3	604.4
127.5°	656.5	662.4	660.4	654.5	650.6
130°	701.7	709.5	706.6	702.7	695.8
132.5°	746.9	754.7	752.8	747.9	742.9
135°	793.1	799.0	798.0	794.1	792.1
137.5°	835.3	840.2	843.2	838.3	835.3
140°	879.5	884.5	885.4	884.5	877.6
142.5°	919.8	924.8	926.7	925.7	920.8
145°	962.1	964.1	967.0	966.0	962.1
147.5°	998.5	1002.4	1005.3	1005.3	999.4
150°	1036.8	1038.8	1040.7	1040.7	1034.8
152.5°	1068.2	1071.2	1072.2	1074.1	1069.2
155°	1101.6	1101.6	1102.6	1106.6	1099.7
157.5°	1130.1	1129.2	1130.1	1134.1	1128.2
160°	1156.7	1154.7	1154.7	1159.6	1155.7
162.5°	1180.3	1177.3	1178.3	1183.2	1176.3
165°	1199.9	1197.0	1197.0	1202.9	1196.0
167.5°	1216.6	1212.7	1213.7	1219.6	1213.7
170°	1230.4	1226.5	1226.5	1233.3	1226.5
172.5°	1241.2	1237.3	1237.3	1243.2	1236.3
175°	1248.1	1244.1	1244.1	1250.0	1243.2
177.5°	1252.0	1248.1	1248.1	1254.0	1247.1
180°	1251.0	1251.0	1251.0	1251.0	1251.0

(END OF REPORT)