

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: P1011404

Luminaire Tested: S123DIP-B1165D585UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011404
REPORT IS A COMBINATION OF REPORTS P989548 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB40-4F0-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

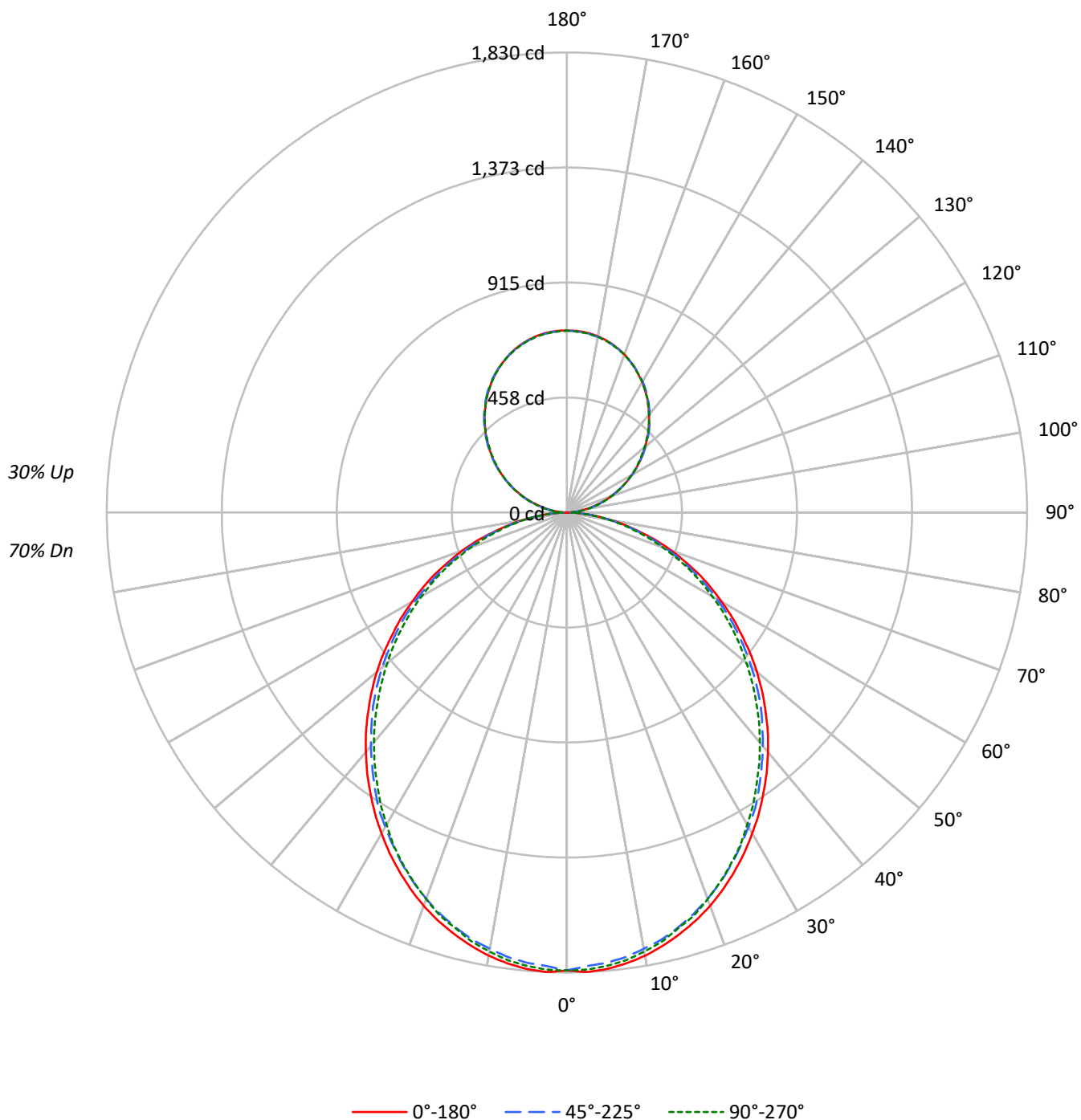
Lumens per Lamp: N/A
Luminaire Lumens: 6747.0 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	64	63
2	93	85	79	74	88	81	75	70	73	68	64	65	62	59	58	55	53
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	51	48	45
4	78	67	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39
5	71	59	51	45	67	57	49	43	51	45	40	46	41	37	41	37	34
6	66	53	45	39	62	51	43	38	46	40	35	42	36	32	38	33	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	34	30	27
8	57	44	36	30	54	42	35	29	38	32	28	35	30	26	32	27	24
9	53	40	32	27	50	39	31	26	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	35	29	24	33	27	22	30	25	21	27	23	20

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	2.5
10°-20°	484.9	7.2
20°-30°	716.2	10.6
30°-40°	836.4	12.4
40°-50°	840.9	12.5
50°-60°	738.7	10.9
60°-70°	550.1	8.2
70°-80°	313.1	4.6
80°-90°	90.5	1.3
90°-100°	46.6	0.7
100°-110°	141.0	2.1
110°-120°	240.0	3.6
120°-130°	315.7	4.7
130°-140°	354.8	5.3
140°-150°	348.8	5.2
150°-160°	293.7	4.4
160°-170°	195.5	2.9
170°-180°	68.5	1.0
0°-30°	1372.8	20.3
0°-40°	2209.3	32.7
0°-60°	3788.8	56.2
0°-90°	4742.5	70.3
90°-120°	427.5	6.3
90°-150°	1446.8	21.4
90°-180°	2004.0	29.7
0°-180°	6747.0	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	6	14	16	17	8
95°	34	38	42	44	44	37
105°	128	129	134	134	135	137
115°	242	243	242	243	242	239
125°	354	355	354	352	350	315
135°	459	462	461	459	458	353
145°	556	558	559	559	556	347
155°	637	637	638	640	636	293
165°	694	692	692	696	692	196
175°	722	719	719	723	719	69
180°	723	723	723	723	723	

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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°	0.6	6.3	13.6	15.9	17.0
92.5°	17.0	20.5	23.9	25.6	24.4
95°	33.5	37.5	42.1	44.3	44.3
97.5°	55.1	58.0	61.4	64.2	63.6
100°	77.3	80.7	83.5	85.2	86.4
102.5°	102.9	104.6	108.5	110.2	109.7
105°	127.9	129.0	134.1	134.1	135.3
107.5°	157.4	158.0	160.3	162.0	161.4
110°	184.7	185.8	187.0	189.2	188.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	213.1	213.7	213.7	216.5	216.5
115°	241.5	243.2	242.1	242.7	242.1
117.5°	270.5	271.1	269.9	269.9	268.2
120°	297.2	300.6	297.8	297.2	296.1
122.5°	325.1	327.3	326.2	324.5	322.8
125°	353.5	355.2	354.0	351.8	349.5
127.5°	379.6	383.0	381.9	378.5	376.2
130°	405.8	410.3	408.6	406.3	402.3
132.5°	431.9	436.4	435.3	432.5	429.6
135°	458.6	462.0	461.4	459.2	458.0
137.5°	483.0	485.9	487.6	484.7	483.0
140°	508.6	511.5	512.0	511.5	507.5
142.5°	531.9	534.8	535.9	535.3	532.5
145°	556.3	557.5	559.2	558.6	556.3
147.5°	577.4	579.6	581.4	581.4	577.9
150°	599.5	600.7	601.8	601.8	598.4
152.5°	617.7	619.4	620.0	621.1	618.3
155°	637.0	637.0	637.6	639.9	635.9
157.5°	653.5	653.0	653.5	655.8	652.4
160°	668.9	667.7	667.7	670.6	668.3
162.5°	682.5	680.8	681.4	684.2	680.2
165°	693.9	692.2	692.2	695.6	691.6
167.5°	703.5	701.3	701.8	705.2	701.8
170°	711.5	709.2	709.2	713.2	709.2
172.5°	717.7	715.5	715.5	718.9	714.9
175°	721.7	719.4	719.4	722.9	718.9
177.5°	724.0	721.7	721.7	725.1	721.1
180°	723.4	723.4	723.4	723.4	723.4

(END OF REPORT)