

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: P1011447

Luminaire Tested: S123DIP-B1165D805UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011447
REPORT IS A COMBINATION OF REPORTS P989609 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB40-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

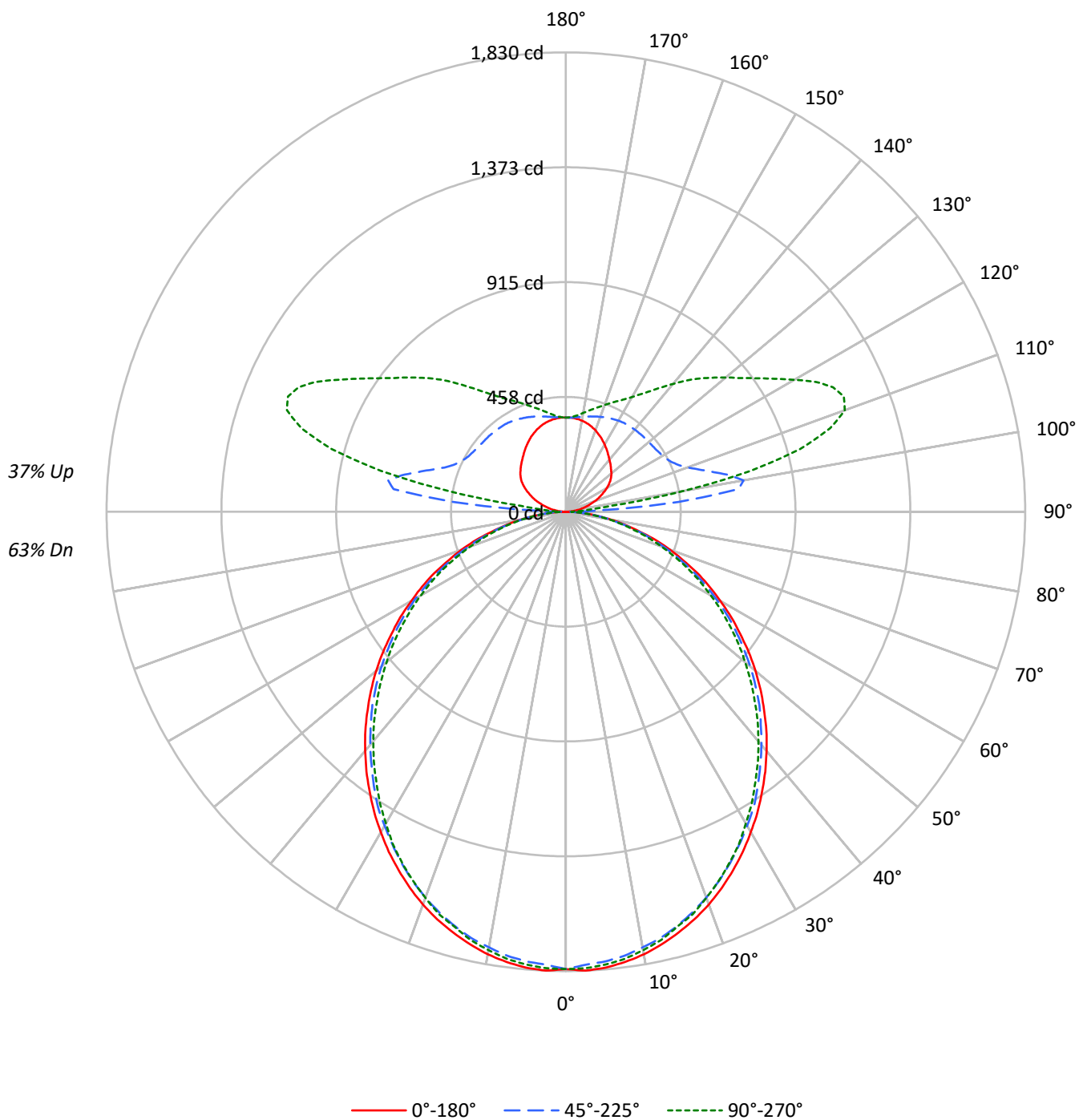
Lumens per Lamp: N/A
Luminaire Lumens: 7570.6 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	103	103	103	103	90	90	90	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	60	58	57
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	43	41
4	76	65	57	51	71	62	54	49	54	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	47	42	49	43	38	43	38	34	37	34	31
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	34	28	36	30	26	32	27	24	29	25	22
9	52	39	32	27	49	37	30	25	33	28	23	30	25	21	26	22	19
10	49	36	29	24	45	34	28	23	31	25	21	28	23	19	24	21	18

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	2.3
10°-20°	484.9	6.4
20°-30°	716.2	9.5
30°-40°	836.4	11.0
40°-50°	840.9	11.1
50°-60°	738.7	9.8
60°-70°	550.1	7.3
70°-80°	313.1	4.1
80°-90°	91.1	1.2
90°-100°	213.1	2.8
100°-110°	595.7	7.9
110°-120°	580.8	7.7
120°-130°	462.5	6.1
130°-140°	365.1	4.8
140°-150°	272.4	3.6
150°-160°	190.0	2.5
160°-170°	111.6	1.5
170°-180°	36.3	0.5
0°-30°	1372.8	18.1
0°-40°	2209.3	29.2
0°-60°	3788.8	50.0
0°-90°	4743.1	62.7
90°-120°	1389.6	18.4
90°-150°	2489.6	32.9
90°-180°	2828.0	37.4
0°-180°	7570.6	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°	2	9	19	21	22	8
95°	26	84	450	131	88	27
105°	88	130	610	1067	966	94
115°	156	194	467	1024	1174	154
125°	216	255	436	790	926	192
135°	254	303	430	650	751	196
145°	289	331	424	533	587	181
155°	329	354	411	467	487	151
165°	359	369	393	417	424	101
175°	374	375	377	383	382	36
180°	375	375	375	375	375	

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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°	1.5	9.2	19.0	21.2	22.0
92.5°	11.4	45.6	141.2	48.2	40.2
95°	25.8	83.9	450.2	131.4	88.1
97.5°	41.0	96.1	692.3	330.2	180.7
100°	56.2	105.9	718.9	690.8	476.0
102.5°	72.1	117.3	669.6	925.0	753.8
105°	88.1	130.2	610.4	1067.4	965.6
107.5°	104.8	145.4	558.0	1130.0	1103.8
110°	123.0	161.0	514.7	1131.9	1182.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.7	177.2	485.9	1089.0	1198.7
115°	155.6	194.0	466.9	1023.7	1174.4
117.5°	171.6	209.9	454.0	953.9	1121.3
120°	188.3	225.8	445.6	887.8	1051.4
122.5°	202.7	241.0	440.3	835.8	986.1
125°	216.4	255.4	435.7	789.5	926.2
127.5°	227.0	269.2	433.5	751.6	874.5
130°	236.9	281.2	431.2	716.6	832.0
132.5°	244.4	292.2	430.4	684.0	790.3
135°	253.6	302.6	429.7	650.2	750.8
137.5°	261.9	310.9	428.2	618.4	709.0
140°	270.3	318.5	427.4	587.2	665.0
142.5°	279.4	325.3	425.9	558.8	624.0
145°	289.2	331.4	424.4	533.3	586.8
147.5°	299.1	337.8	422.1	513.6	554.9
150°	309.0	343.2	419.0	496.1	527.6
152.5°	318.8	348.8	415.3	480.9	504.8
155°	328.7	354.5	410.7	466.8	486.6
157.5°	336.3	359.5	406.9	453.2	469.2
160°	345.4	363.6	402.3	440.6	452.5
162.5°	352.2	366.6	397.8	428.9	437.3
165°	359.1	369.4	393.2	417.2	424.4
167.5°	364.4	371.6	388.7	406.9	411.5
170°	368.9	372.8	384.1	397.8	400.1
172.5°	372.0	373.9	380.3	389.8	389.4
175°	374.3	374.6	377.3	382.6	381.9
177.5°	375.8	375.0	375.0	378.1	376.5
180°	375.0	375.0	375.0	375.0	375.0

(END OF REPORT)