

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: P1011446

Luminaire Tested: S123DIP-B1165D805UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011446
REPORT IS A COMBINATION OF REPORTS P989608 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-F1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

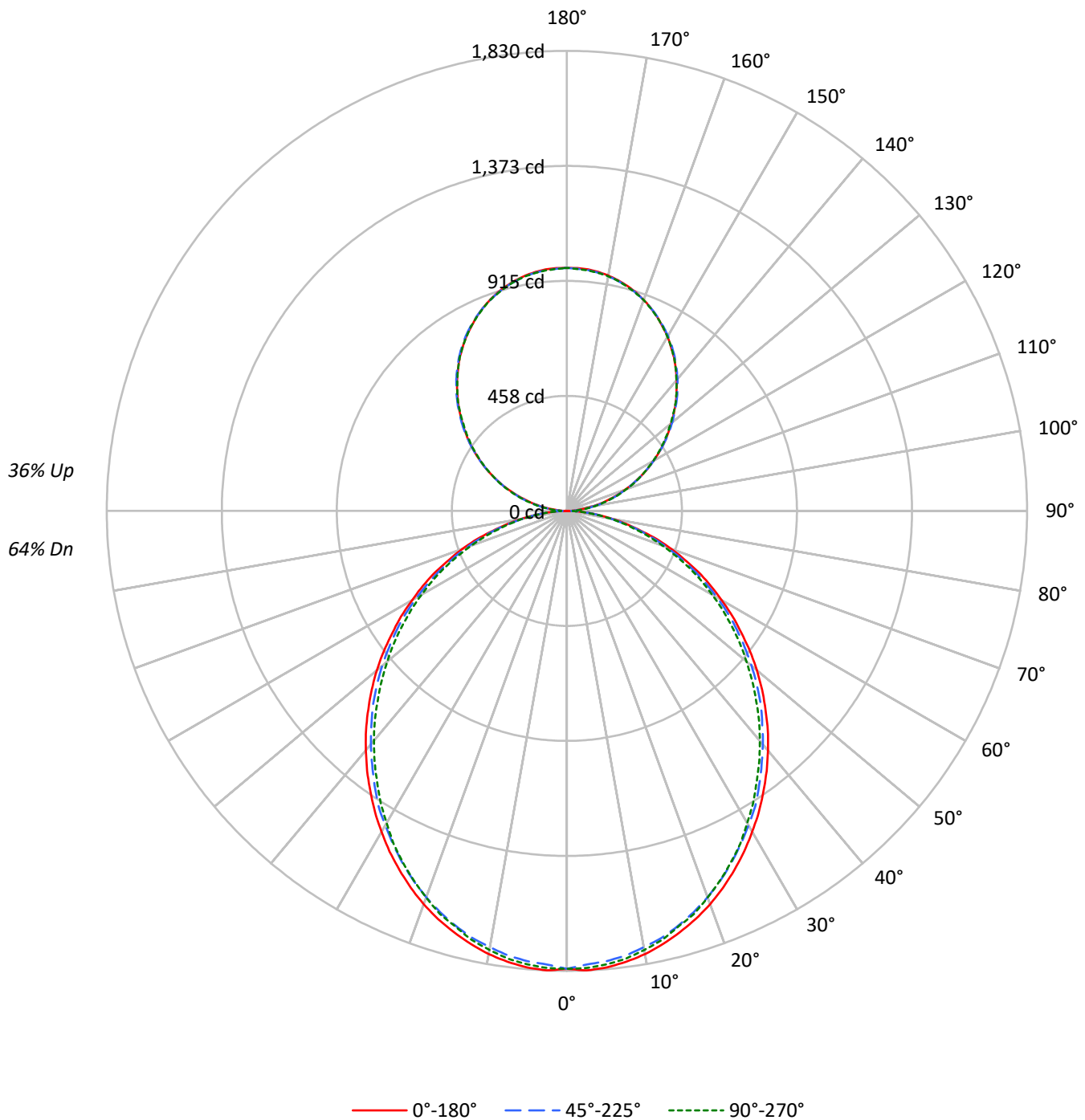
Lumens per Lamp: N/A
Luminaire Lumens: 7421.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	0		
RCR																				
0	110	110	110	110	104	104	104	104	91	91	91	80	80	80	69	69	69	64		
1	101	96	92	89	94	91	87	84	80	77	75	70	68	66	61	59	58	54		
2	92	84	78	72	86	79	74	69	70	66	62	61	58	55	53	51	49	45		
3	84	74	66	60	78	70	63	58	62	56	52	54	50	47	47	44	42	38		
4	77	66	57	51	72	62	55	49	55	49	44	48	44	40	42	39	36	33		
5	70	58	50	44	66	55	48	42	49	43	38	43	39	35	38	34	31	28		
6	65	53	44	38	61	50	42	37	44	38	34	39	34	30	35	31	27	25		
7	60	47	39	34	56	45	38	32	40	34	30	36	31	27	32	28	24	22		
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	20		
9	52	40	32	27	49	38	30	26	34	28	24	30	25	22	27	23	20	18		
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	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	2.3
10°-20°	484.9	6.5
20°-30°	716.2	9.7
30°-40°	836.4	11.3
40°-50°	840.9	11.3
50°-60°	738.7	10.0
60°-70°	550.1	7.4
70°-80°	313.1	4.2
80°-90°	91.1	1.2
90°-100°	62.2	0.8
100°-110°	188.3	2.5
110°-120°	320.6	4.3
120°-130°	421.7	5.7
130°-140°	474.0	6.4
140°-150°	466.0	6.3
150°-160°	392.4	5.3
160°-170°	261.2	3.5
170°-180°	91.5	1.2
0°-30°	1372.8	18.5
0°-40°	2209.3	29.8
0°-60°	3788.8	51.1
0°-90°	4743.0	63.9
90°-120°	571.1	7.7
90°-150°	1932.9	26.0
90°-180°	2678.0	36.1
0°-180°	7421.0	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	8	18	21	23	9
95°	45	50	56	59	59	49
105°	171	172	179	179	181	183
115°	323	325	323	324	323	319
125°	472	474	473	470	467	421
135°	613	617	616	613	612	472
145°	743	745	747	746	743	464
155°	851	851	852	855	850	392
165°	927	925	925	929	924	261
175°	964	961	961	966	960	92
180°	966	966	966	966	966	

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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°	0.8	8.4	18.2	21.3	22.8
92.5°	22.8	27.3	31.9	34.2	32.6
95°	44.8	50.1	56.2	59.2	59.2
97.5°	73.6	77.4	82.0	85.8	85.0
100°	103.3	107.8	111.6	113.9	115.4
102.5°	137.4	139.7	145.0	147.3	146.5
105°	170.8	172.3	179.2	179.2	180.7
107.5°	210.3	211.1	214.1	216.4	215.6
110°	246.7	248.3	249.8	252.8	251.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.7	285.5	285.5	289.3	289.3
115°	322.7	324.9	323.4	324.2	323.4
117.5°	361.4	362.1	360.6	360.6	358.4
120°	397.1	401.6	397.8	397.1	395.6
122.5°	434.3	437.3	435.8	433.5	431.2
125°	472.2	474.5	473.0	470.0	466.9
127.5°	507.2	511.7	510.2	505.6	502.6
130°	542.1	548.2	545.9	542.8	537.5
132.5°	577.0	583.1	581.6	577.8	574.0
135°	612.7	617.2	616.5	613.4	611.9
137.5°	645.3	649.1	651.4	647.6	645.3
140°	679.5	683.3	684.1	683.3	678.0
142.5°	710.6	714.4	715.9	715.2	711.4
145°	743.3	744.8	747.1	746.3	743.3
147.5°	771.4	774.4	776.7	776.7	772.1
150°	801.0	802.5	804.0	804.0	799.5
152.5°	825.3	827.5	828.3	829.8	826.0
155°	851.1	851.1	851.8	854.9	849.6
157.5°	873.1	872.3	873.1	876.1	871.6
160°	893.6	892.1	892.1	895.9	892.8
162.5°	911.8	909.5	910.3	914.1	908.8
165°	927.0	924.7	924.7	929.3	924.0
167.5°	939.9	936.9	937.6	942.2	937.6
170°	950.5	947.5	947.5	952.8	947.5
172.5°	958.9	955.9	955.9	960.4	955.1
175°	964.2	961.2	961.2	965.7	960.4
177.5°	967.2	964.2	964.2	968.8	963.4
180°	966.5	966.5	966.5	966.5	966.5

(END OF REPORT)