

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: P1011438

Luminaire Tested: S123DIP-B1165D805UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011438
REPORT IS A COMBINATION OF REPORTS P989600 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB35-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

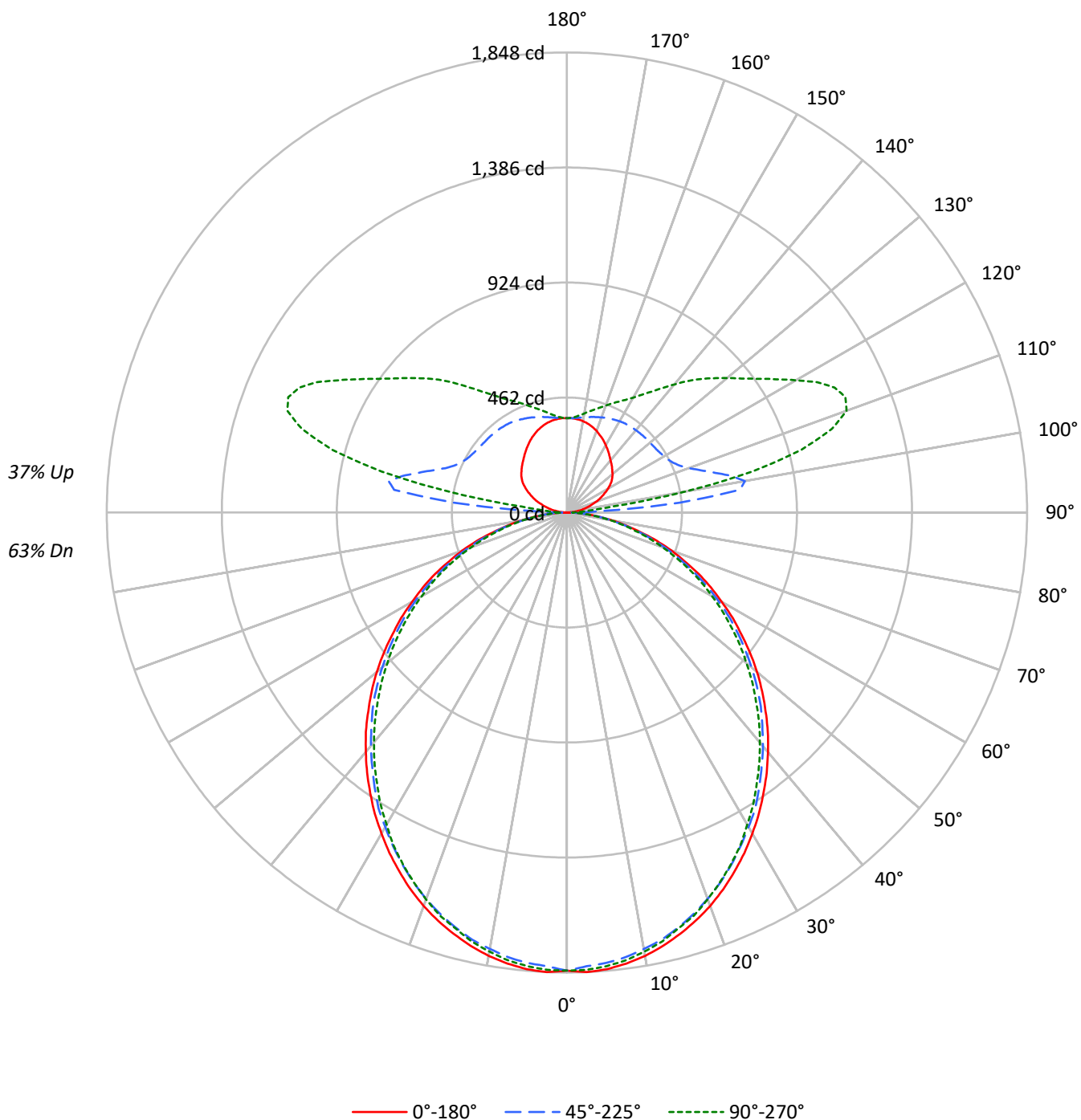
Lumens per Lamp: N/A
Luminaire Lumens: 7647.6 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	19807	19807	19807
5°	19856	19123	19094
10°	19680	18476	18287
15°	19406	17803	17406
20°	19092	17055	16532
25°	18686	16267	15600
30°	18242	15451	14618
35°	17776	14618	13643
40°	17290	13742	12683
45°	16754	12889	11681
50°	16209	11939	10675
55°	15510	10948	9656
60°	14789	9857	8571
65°	14113	8675	7440
70°	13140	7364	6120
75°	11735	5832	4751
80°	10136	4098	3361
85°	7905	2203	1682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16754 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	2.3
10°-20°	489.8	6.4
20°-30°	723.4	9.5
30°-40°	844.9	11.0
40°-50°	849.4	11.1
50°-60°	746.1	9.8
60°-70°	555.7	7.3
70°-80°	316.2	4.1
80°-90°	92.0	1.2
90°-100°	215.3	2.8
100°-110°	601.8	7.9
110°-120°	586.8	7.7
120°-130°	467.2	6.1
130°-140°	368.8	4.8
140°-150°	275.2	3.6
150°-160°	192.0	2.5
160°-170°	112.8	1.5
170°-180°	36.7	0.5
0°-30°	1386.7	18.1
0°-40°	2231.6	29.2
0°-60°	3827.2	50.0
0°-90°	4791.1	62.6
90°-120°	1403.9	18.4
90°-150°	2515.1	32.9
90°-180°	2857.0	37.4
0°-180°	7647.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1842	1834	1816	1832	1829	175
15°	1753	1747	1726	1739	1729	494
25°	1592	1582	1562	1563	1558	733
35°	1376	1367	1346	1337	1329	861
45°	1128	1122	1101	1082	1074	871
55°	856	854	834	816	808	767
65°	584	576	560	547	543	576
75°	308	302	298	290	285	330
85°	82	79	79	76	76	88
90°	2	9	19	21	22	8
95°	26	85	455	133	89	28
105°	89	132	617	1078	976	94
115°	157	196	472	1034	1186	156
125°	219	258	440	798	936	194
135°	256	306	434	657	758	198
145°	292	335	429	539	593	183
155°	332	358	415	472	492	153
165°	363	373	397	421	429	102
175°	378	378	381	386	386	36
180°	379	379	379	379	379	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1848.0	1841.7	1824.3	1840.1	1838.5
5°	1841.7	1833.8	1816.4	1832.2	1829.0
7.5°	1827.5	1819.5	1802.1	1816.4	1814.8
10°	1808.5	1800.6	1780.0	1794.2	1791.1
12.5°	1783.2	1776.8	1757.8	1767.3	1765.7
15°	1753.1	1746.8	1726.2	1738.9	1729.4
17.5°	1719.9	1712.0	1691.4	1700.9	1697.7
20°	1681.9	1672.4	1651.8	1658.2	1653.4
22.5°	1639.2	1629.7	1609.1	1613.9	1607.5
25°	1591.7	1582.2	1561.6	1563.2	1558.5
27.5°	1542.7	1533.2	1511.0	1512.6	1507.8
30°	1488.9	1481.0	1458.8	1458.8	1447.7
32.5°	1435.1	1424.0	1408.2	1397.1	1392.3
35°	1376.5	1367.0	1346.5	1337.0	1329.1
37.5°	1318.0	1305.3	1284.8	1273.7	1268.9
40°	1256.3	1246.8	1224.6	1212.0	1205.6
42.5°	1194.6	1183.5	1161.3	1148.7	1142.4
45°	1128.1	1121.8	1101.2	1082.2	1074.3
47.5°	1063.2	1053.8	1034.8	1015.8	1009.5
50°	996.8	988.9	968.3	950.9	941.4
52.5°	927.2	922.4	900.3	886.0	876.5
55°	856.0	854.4	833.8	816.4	808.5
57.5°	789.5	783.2	767.4	751.6	742.1
60°	716.7	715.2	696.2	681.9	674.0
62.5°	651.9	647.1	628.1	613.9	609.2
65°	583.8	575.9	560.1	547.4	542.7
67.5°	511.1	504.7	492.1	481.0	474.7
70°	446.2	436.7	427.2	416.1	408.2
72.5°	378.1	371.8	360.7	351.3	348.1
75°	308.5	302.2	297.5	289.5	284.8
77.5°	246.8	243.7	237.3	231.0	231.0
80°	186.7	182.0	178.8	177.2	177.2
82.5°	128.2	128.2	128.2	125.0	123.4
85°	82.3	79.1	79.1	75.9	75.9
87.5°	41.1	36.4	34.8	33.2	33.2
90°	1.5	9.2	19.2	21.4	22.2
92.5°	11.5	46.0	142.7	48.7	40.6
95°	26.1	84.8	454.8	132.7	89.0
97.5°	41.4	97.0	699.5	333.6	182.5
100°	56.8	107.0	726.3	698.0	480.9
102.5°	72.9	118.5	676.4	934.5	761.6
105°	89.0	131.5	616.6	1078.4	975.6
107.5°	105.8	146.8	563.7	1141.6	1115.1
110°	124.2	162.6	520.0	1143.6	1194.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.1	179.0	490.8	1100.2	1211.0
115°	157.2	196.0	471.7	1034.2	1186.5
117.5°	173.3	212.0	458.6	963.6	1132.8
120°	190.2	228.2	450.2	897.0	1062.2
122.5°	204.8	243.6	444.8	844.4	996.3
125°	218.6	258.0	440.2	797.6	935.7
127.5°	229.3	271.8	437.9	759.3	883.5
130°	239.3	284.2	435.6	724.0	840.6
132.5°	247.0	295.2	434.9	691.0	798.4
135°	256.2	305.6	434.1	656.8	758.5
137.5°	264.6	314.1	432.6	624.7	716.3
140°	273.0	321.7	431.8	593.2	671.8
142.5°	282.2	328.6	430.3	564.5	630.4
145°	292.2	334.8	428.7	538.8	592.8
147.5°	302.2	341.3	426.4	518.8	560.6
150°	312.1	346.7	423.4	501.2	533.0
152.5°	322.1	352.4	419.5	485.8	510.0
155°	332.1	358.2	414.9	471.7	491.6
157.5°	339.8	363.2	411.1	457.8	474.0
160°	349.0	367.4	406.5	445.2	457.1
162.5°	355.9	370.4	401.9	433.3	441.8
165°	362.8	373.1	397.3	421.4	428.7
167.5°	368.1	375.4	392.7	411.0	415.7
170°	372.7	376.6	388.1	401.8	404.2
172.5°	375.8	377.7	384.2	393.8	393.4
175°	378.1	378.5	381.2	386.5	385.8
177.5°	379.6	378.9	378.9	381.9	380.4
180°	378.9	378.9	378.9	378.9	378.9

(END OF REPORT)