

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: P1011452

Luminaire Tested: S123DIP-B1165D805UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011452
REPORT IS A COMBINATION OF REPORTS P989614 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

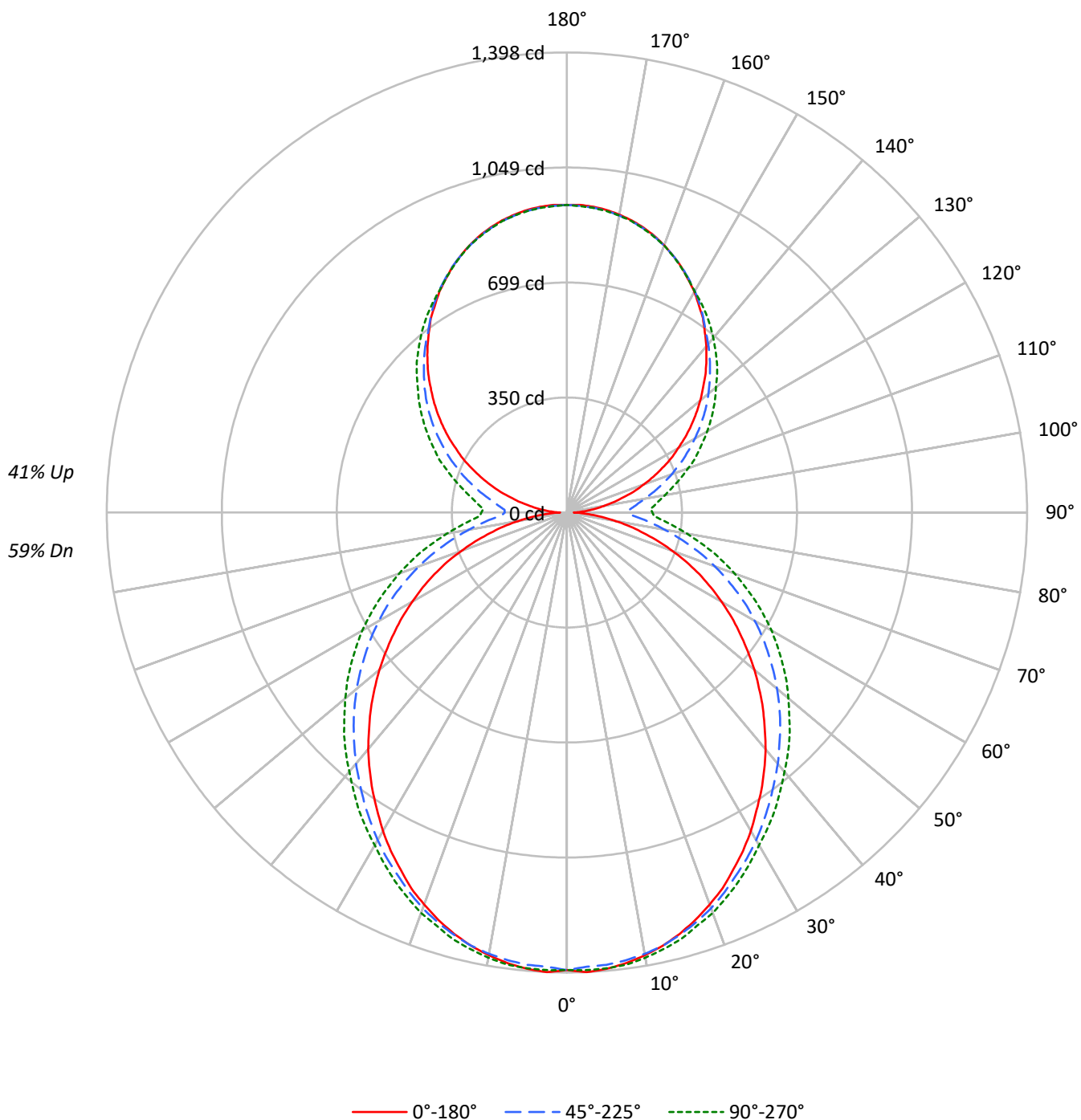
Lumens per Lamp: N/A
Luminaire Lumens: 7265.0 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	99	94	89	85	92	87	83	80	76	73	70	65	63	61	55	53	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	57	52	47	49	45	42	42	39	36
4	74	63	54	48	69	58	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	26
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.8
10°-20°	376.0	5.2
20°-30°	562.3	7.7
30°-40°	671.4	9.2
40°-50°	702.4	9.7
50°-60°	659.2	9.1
60°-70°	550.6	7.6
70°-80°	393.7	5.4
80°-90°	236.2	3.3
90°-100°	207.4	2.9
100°-110°	290.3	4.0
110°-120°	382.3	5.3
120°-130°	449.1	6.2
130°-140°	477.0	6.6
140°-150°	454.6	6.3
150°-160°	379.5	5.2
160°-170°	252.6	3.5
170°-180°	88.5	1.2
0°-30°	1070.2	14.7
0°-40°	1741.6	24.0
0°-60°	3103.2	42.7
0°-90°	4283.7	59.0
90°-120°	880.0	12.1
90°-150°	2260.7	31.1
90°-180°	2981.0	41.0
0°-180°	7265.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	20	102	189	243	260	17
95°	60	124	204	254	269	61
105°	177	215	287	329	344	189
115°	320	340	393	430	442	317
125°	461	463	506	535	542	412
135°	596	598	614	639	645	459
145°	720	720	722	734	737	450
155°	823	823	824	827	822	379
165°	897	894	894	899	894	253
175°	932	930	930	934	929	89
180°	935	935	935	935	935	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	20.4	102.0	188.8	243.3	259.8
92.5°	40.2	109.7	189.8	242.0	254.3
95°	60.0	124.2	204.3	254.2	269.4
97.5°	86.3	144.6	220.2	269.3	283.6
100°	113.5	166.4	239.7	285.8	302.4
102.5°	145.0	189.6	262.9	307.6	321.9
105°	177.3	215.2	286.9	329.3	344.4
107.5°	214.0	246.5	311.6	354.7	367.5
110°	247.7	276.5	338.5	380.8	391.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.5	306.4	363.9	405.5	419.1
115°	319.7	340.0	393.1	430.1	441.5
117.5°	357.1	370.0	420.0	456.3	466.3
120°	390.1	402.0	448.4	482.5	491.7
122.5°	426.1	432.1	477.5	508.7	517.1
125°	461.2	463.4	506.0	534.8	542.5
127.5°	495.0	497.9	534.3	560.2	567.9
130°	528.8	533.2	561.3	587.1	591.1
132.5°	561.1	566.9	588.2	611.8	618.7
135°	595.6	598.5	614.4	638.7	644.8
137.5°	627.1	629.3	642.1	662.7	668.0
140°	658.7	662.4	667.7	689.7	692.1
142.5°	688.8	691.0	692.4	711.4	715.3
145°	720.4	720.3	722.5	733.9	737.1
147.5°	746.0	749.0	751.2	755.7	757.4
150°	774.7	776.1	777.6	777.6	776.2
152.5°	798.2	800.4	801.1	802.6	798.9
155°	823.1	823.1	823.9	826.8	821.7
157.5°	844.4	843.7	844.4	847.4	843.0
160°	864.3	862.8	862.8	866.5	863.5
162.5°	881.9	879.7	880.4	884.1	878.9
165°	896.6	894.4	894.4	898.8	893.6
167.5°	909.1	906.1	906.8	911.3	906.8
170°	919.3	916.4	916.4	921.5	916.4
172.5°	927.4	924.5	924.5	928.9	923.7
175°	932.5	929.6	929.6	934.0	928.9
177.5°	935.5	932.5	932.5	937.0	931.8
180°	934.8	934.8	934.8	934.8	934.8

(END OF REPORT)