

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: P1011270

Luminaire Tested: S123DIP-B1165D1025UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011270
REPORT IS A COMBINATION OF REPORTS P989366 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB40-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

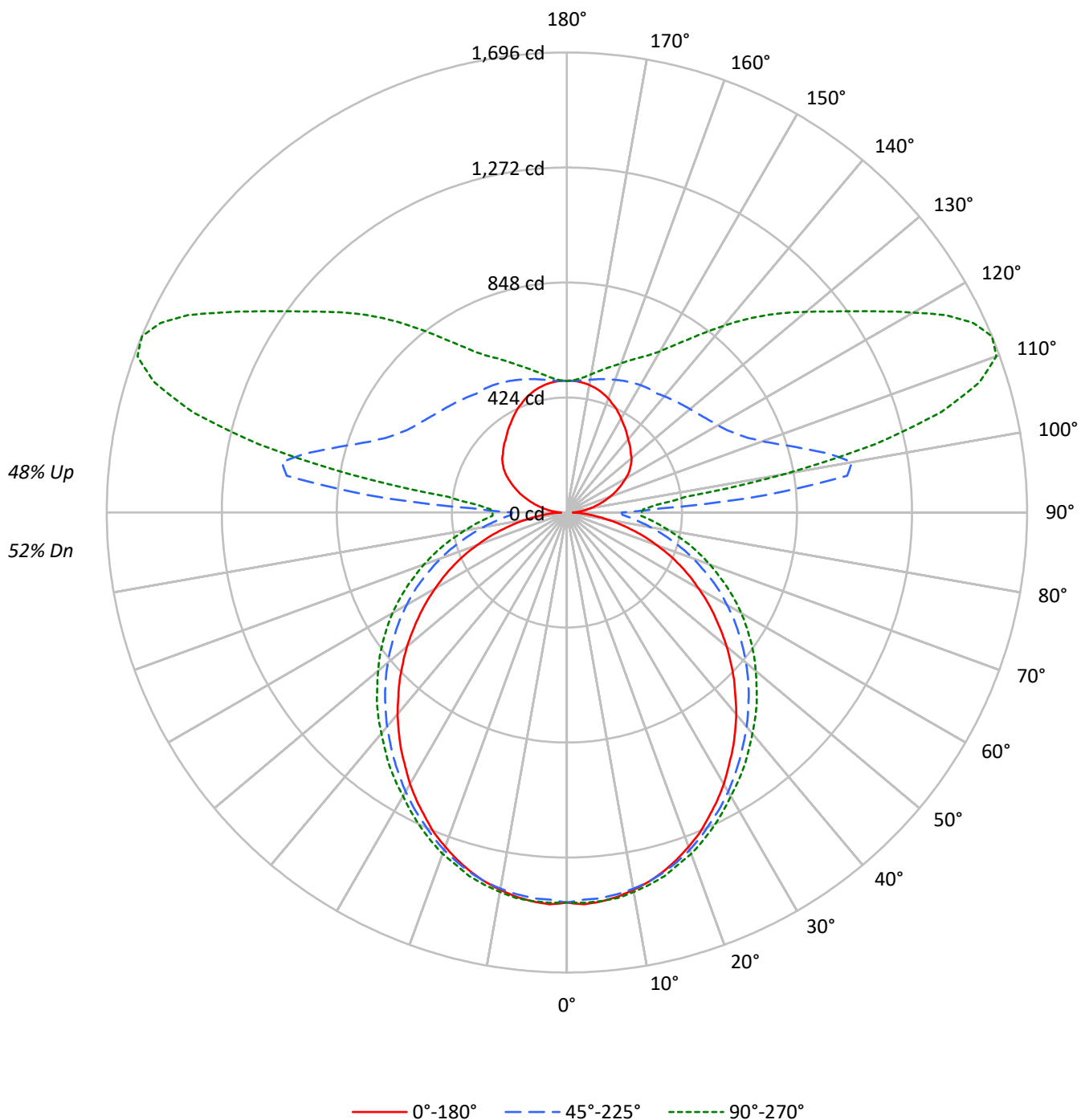
Lumens per Lamp: N/A
Luminaire Lumens: 8495.5 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	97	92	88	84	90	85	82	78	72	70	67	61	59	57	50	48	47
2	88	80	73	68	81	74	68	63	63	59	55	53	49	47	43	41	39
3	80	70	62	56	74	65	58	52	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	30	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	28	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21
7	57	44	36	30	52	41	34	29	35	29	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	26	22	27	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	17	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	1.6
10°-20°	388.9	4.6
20°-30°	581.6	6.8
30°-40°	694.4	8.2
40°-50°	726.5	8.6
50°-60°	681.7	8.0
60°-70°	569.4	6.7
70°-80°	407.2	4.8
80°-90°	245.0	2.9
90°-100°	428.1	5.0
100°-110°	882.9	10.4
110°-120°	826.5	9.7
120°-130°	641.3	7.5
130°-140°	491.7	5.8
140°-150°	356.5	4.2
150°-160°	246.0	2.9
160°-170°	144.5	1.7
170°-180°	47.0	0.6
0°-30°	1106.9	13.0
0°-40°	1801.2	21.2
0°-60°	3209.4	37.8
0°-90°	4431.0	52.2
90°-120°	2137.5	25.2
90°-150°	3627.0	42.7
90°-180°	4064.0	47.8
0°-180°	8495.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	22	109	202	258	274	17
95°	51	187	738	374	333	49
105°	126	219	908	1543	1425	134
115°	209	278	687	1446	1653	208
125°	285	335	614	1105	1293	254
135°	331	393	575	889	1027	256
145°	376	429	549	703	778	235
155°	426	459	532	604	630	196
165°	465	478	509	540	549	131
175°	484	485	488	495	494	46
180°	485	485	485	485	485	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	22.4	108.9	201.6	257.8	274.4
92.5°	33.5	145.2	347.3	278.6	282.4
95°	50.6	186.9	737.8	373.6	333.3
97.5°	68.8	196.4	1041.8	620.1	442.2
100°	86.8	201.2	1066.8	1075.8	813.5
102.5°	105.8	208.2	993.6	1368.0	1162.1
105°	126.5	218.6	907.5	1543.0	1425.3
107.5°	146.6	232.0	830.3	1613.1	1593.2
110°	168.6	246.0	766.5	1606.1	1684.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	190.2	260.8	719.8	1539.6	1695.6
115°	209.2	277.7	687.3	1445.6	1653.3
117.5°	229.9	292.1	661.2	1345.9	1575.1
120°	250.0	306.4	642.6	1251.0	1473.7
122.5°	268.7	321.3	627.9	1174.3	1379.8
125°	284.7	335.3	614.1	1104.9	1292.8
127.5°	298.5	351.5	603.4	1046.4	1216.6
130°	311.3	367.2	592.6	991.8	1150.5
132.5°	319.5	381.4	583.7	940.1	1088.7
135°	331.3	393.2	575.0	888.6	1026.6
137.5°	342.1	404.0	566.7	838.0	963.2
140°	351.4	413.8	559.5	789.8	898.4
142.5°	363.2	421.0	551.2	743.6	835.9
145°	376.0	428.9	549.3	702.8	778.4
147.5°	387.1	437.2	546.3	669.4	729.3
150°	399.9	444.2	542.4	642.2	686.0
152.5°	412.7	451.6	537.5	622.5	653.4
155°	425.5	458.9	531.6	604.3	629.9
157.5°	435.3	465.3	526.7	586.6	607.3
160°	447.1	470.7	520.8	570.4	585.6
162.5°	455.9	474.6	514.9	555.2	566.0
165°	464.8	478.0	509.0	540.0	549.3
167.5°	471.7	481.0	503.1	526.7	532.6
170°	477.6	482.4	497.2	514.9	517.8
172.5°	481.5	483.9	492.3	504.6	504.1
175°	484.4	484.9	488.4	495.2	494.3
177.5°	486.4	485.4	485.4	489.3	487.4
180°	485.4	485.4	485.4	485.4	485.4

(END OF REPORT)