

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: P1011411

Luminaire Tested: S123DIP-B1165D585UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011411
REPORT IS A COMBINATION OF REPORTS P989555 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB50-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

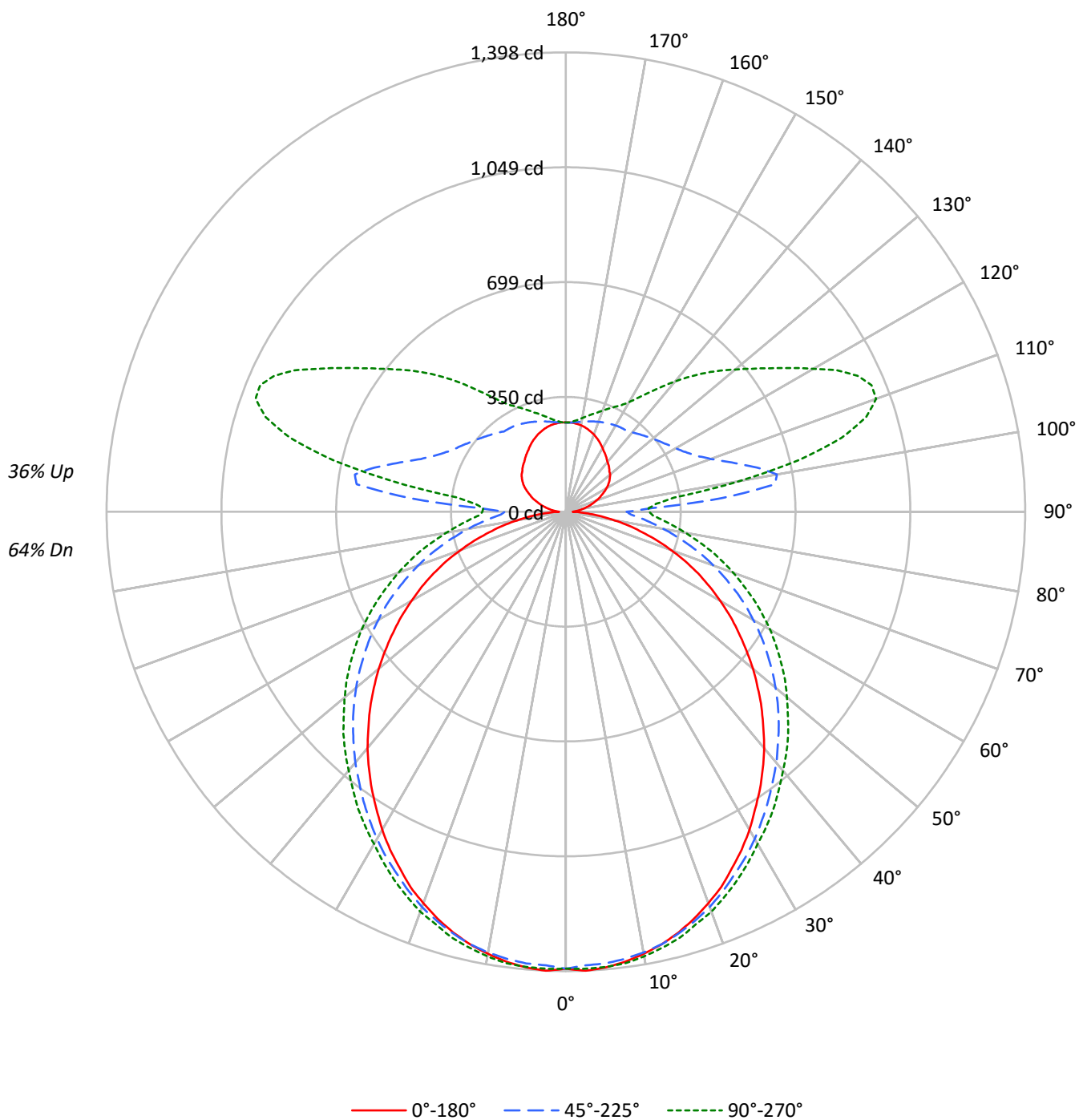
Lumens per Lamp: N/A
Luminaire Lumens: 6721.7 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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	104	104	104	104	91	91	91	79	79	79	69	69	69
1	100	95	90	86	93	89	85	81	78	75	72	68	66	63	59	57	55
2	90	82	75	69	84	77	71	66	67	63	59	59	55	52	51	48	46
3	82	72	63	57	76	67	60	54	59	53	49	52	47	43	45	41	38
4	75	63	55	48	70	59	52	46	52	46	41	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	36	32	28
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25
7	58	45	37	31	55	43	35	30	38	32	27	34	28	24	29	25	22
8	54	41	33	27	51	39	32	26	35	28	24	31	26	22	27	23	20
9	51	38	30	24	47	36	28	23	32	26	22	28	23	20	25	21	18
10	47	35	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16

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	2.0
10°-20°	376.0	5.6
20°-30°	562.3	8.4
30°-40°	671.4	10.0
40°-50°	702.4	10.5
50°-60°	659.2	9.8
60°-70°	550.6	8.2
70°-80°	393.7	5.9
80°-90°	235.8	3.5
90°-100°	301.5	4.5
100°-110°	539.5	8.0
110°-120°	492.8	7.3
120°-130°	376.1	5.6
130°-140°	282.8	4.2
140°-150°	201.1	3.0
150°-160°	137.6	2.0
160°-170°	80.8	1.2
170°-180°	26.3	0.4
0°-30°	1070.2	15.9
0°-40°	1741.6	25.9
0°-60°	3103.2	46.2
0°-90°	4283.2	63.7
90°-120°	1333.8	19.8
90°-150°	2193.8	32.6
90°-180°	2438.0	36.3
0°-180°	6721.7	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°	21	100	185	238	254	16
95°	35	136	476	292	276	33
105°	76	143	556	929	869	80
115°	120	166	418	858	979	119
125°	161	189	364	652	762	144
135°	187	221	329	516	597	144
145°	211	240	307	398	443	132
155°	238	257	297	338	352	109
165°	260	267	285	302	307	73
175°	271	271	273	277	276	26
180°	272	272	272	272	272	

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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°	20.8	100.4	184.9	238.0	253.7
92.5°	26.4	116.2	261.2	243.9	251.8
95°	35.4	136.4	475.9	292.0	275.9
97.5°	44.8	139.2	642.2	425.4	332.2
100°	54.3	138.8	652.3	675.9	535.4
102.5°	64.3	139.4	607.5	834.8	726.0
105°	75.9	142.8	555.5	928.8	868.8
107.5°	86.5	147.6	508.5	963.6	958.2
110°	98.1	152.9	469.6	955.8	1004.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.2	158.7	439.6	914.2	1007.2
115°	120.3	166.1	418.3	857.8	979.0
117.5°	131.8	171.7	399.9	798.2	931.5
120°	142.4	177.2	386.3	741.4	870.4
122.5°	152.9	183.6	374.8	694.6	814.0
125°	161.2	189.4	364.0	652.0	761.5
127.5°	168.8	197.9	354.8	615.4	715.0
130°	176.0	206.6	345.5	581.0	673.6
132.5°	180.0	214.6	337.4	548.2	635.8
135°	186.6	220.6	329.3	516.2	596.6
137.5°	192.6	226.6	322.1	484.1	557.3
140°	197.2	232.1	315.6	454.0	517.9
142.5°	203.8	235.6	308.4	424.2	479.1
145°	210.9	239.9	307.3	398.2	443.1
147.5°	216.6	244.6	305.6	376.4	412.4
150°	223.7	248.4	303.4	359.2	385.0
152.5°	230.9	252.6	300.7	348.2	365.5
155°	238.0	256.6	297.4	338.0	352.3
157.5°	243.5	260.2	294.6	328.2	339.7
160°	250.1	263.2	291.3	319.1	327.6
162.5°	255.0	265.5	288.0	310.5	316.6
165°	260.0	267.4	284.7	302.0	307.3
167.5°	263.8	269.0	281.4	294.6	297.9
170°	267.1	269.8	278.1	288.0	289.7
172.5°	269.3	270.7	275.4	282.2	282.0
175°	271.0	271.2	273.2	277.0	276.5
177.5°	272.1	271.5	271.5	273.7	272.6
180°	271.5	271.5	271.5	271.5	271.5

(END OF REPORT)