

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: P1011369

Luminaire Tested: S123DIP-B1165D365UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011369
REPORT IS A COMBINATION OF REPORTS P989495 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB50-4F0-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

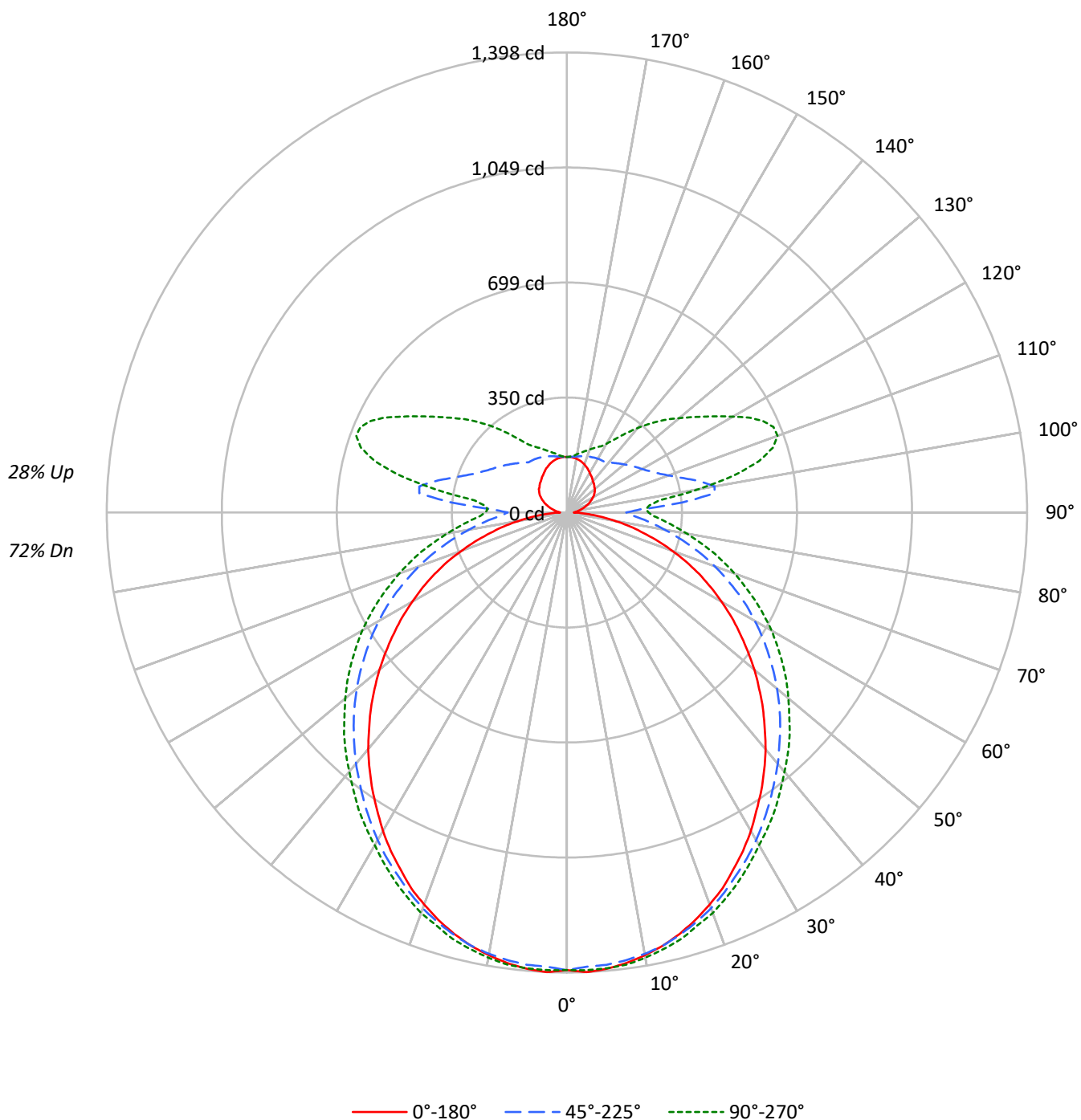
Lumens per Lamp: N/A
Luminaire Lumens: 5946.9 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	112	112	112	112	107	107	107	107	96	96	96	86	86	86	76	76	76
1	101	96	91	87	96	91	87	83	82	78	76	73	71	68	65	63	62
2	92	83	76	70	86	79	73	67	71	66	61	63	59	56	56	53	51
3	83	73	64	58	78	69	62	56	62	56	51	56	51	47	50	46	42
4	76	64	55	49	72	61	53	47	55	48	43	49	44	40	44	40	36
5	70	57	48	42	66	54	46	40	49	42	37	44	39	34	40	35	31
6	64	51	42	36	61	49	41	35	44	37	32	40	34	30	36	31	27
7	59	46	38	32	56	44	36	31	40	33	28	36	31	26	33	28	24
8	55	42	34	28	52	40	32	27	37	30	25	33	28	24	30	25	22
9	51	38	30	25	49	37	29	24	34	27	23	31	25	21	28	23	20
10	48	35	28	23	46	34	27	22	31	25	20	28	23	19	26	21	18

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	2.2
10°-20°	376.0	6.3
20°-30°	562.3	9.5
30°-40°	671.4	11.3
40°-50°	702.4	11.8
50°-60°	659.2	11.1
60°-70°	550.6	9.3
70°-80°	393.7	6.6
80°-90°	235.2	4.0
90°-100°	243.2	4.1
100°-110°	376.4	6.3
110°-120°	333.7	5.6
120°-130°	249.5	4.2
130°-140°	182.9	3.1
140°-150°	126.5	2.1
150°-160°	85.6	1.4
160°-170°	50.3	0.8
170°-180°	16.3	0.3
0°-30°	1070.2	18.0
0°-40°	1741.6	29.3
0°-60°	3103.2	52.2
0°-90°	4282.7	72.0
90°-120°	953.3	16.0
90°-150°	1512.1	25.4
90°-180°	1664.0	28.0
0°-180°	5946.9	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	98	180	232	248	15
95°	28	113	353	256	252	25
105°	52	107	388	637	604	54
115°	78	113	290	578	657	77
125°	102	120	245	436	508	91
135°	117	138	212	338	391	91
145°	132	149	191	252	282	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

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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	98.0	179.7	232.2	247.7
92.5°	23.3	103.8	222.6	230.7	240.8
95°	28.3	113.4	352.7	256.0	251.7
97.5°	33.6	113.0	452.6	335.0	282.7
100°	38.9	109.8	455.5	486.8	405.1
102.5°	44.6	107.3	424.2	581.6	519.6
105°	51.7	107.1	388.4	636.6	604.4
107.5°	57.8	107.8	355.7	654.2	656.0
110°	64.5	108.8	328.6	645.9	680.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	72.0	110.1	306.5	616.0	679.0
115°	77.7	113.0	290.5	577.5	657.4
117.5°	84.8	114.2	275.6	537.0	624.5
120°	90.9	115.3	264.2	498.2	582.5
122.5°	97.4	117.6	254.2	465.7	544.0
125°	101.9	119.5	244.7	435.8	507.9
127.5°	106.7	124.2	236.1	409.6	475.5
130°	111.1	129.6	227.4	384.8	445.8
132.5°	113.1	134.6	219.5	361.0	419.4
135°	117.2	137.7	211.7	338.2	391.0
137.5°	120.9	141.4	204.9	314.8	363.1
140°	123.2	144.9	198.5	293.2	335.8
142.5°	127.3	146.4	191.7	271.2	308.3
145°	131.7	149.2	191.1	252.2	282.4
147.5°	134.7	152.1	190.0	235.7	260.4
150°	139.1	154.5	188.7	223.4	240.5
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)