

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: P1011409

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011409
REPORT IS A COMBINATION OF REPORTS P989553 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-D
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

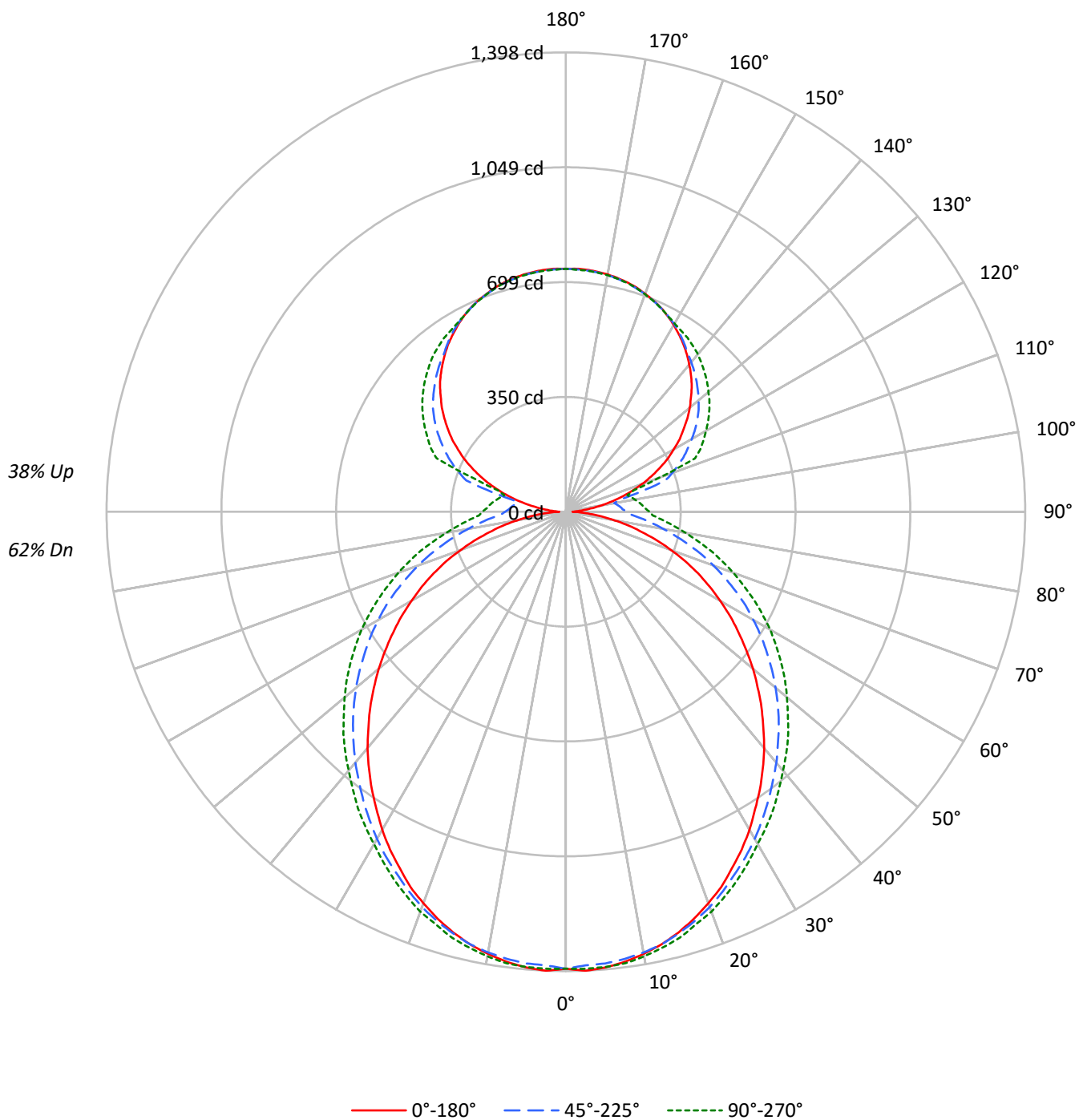
Lumens per Lamp: N/A
Luminaire Lumens: 6929.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	93	88	84	81	77	74	71	67	64	62	57	56	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	50	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	44	40	37
4	75	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28
6	63	50	42	35	59	47	39	34	42	35	30	36	31	27	31	27	24
7	58	45	37	31	54	43	35	30	38	31	27	33	28	24	29	25	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	33	26	21	29	23	19	26	21	17	23	18	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	1.9
10°-20°	376.0	5.4
20°-30°	562.3	8.1
30°-40°	671.4	9.7
40°-50°	702.4	10.1
50°-60°	659.2	9.5
60°-70°	550.6	7.9
70°-80°	393.7	5.7
80°-90°	235.7	3.4
90°-100°	173.3	2.5
100°-110°	234.3	3.4
110°-120°	381.2	5.5
120°-130°	433.5	6.3
130°-140°	437.5	6.3
140°-150°	395.7	5.7
150°-160°	316.1	4.6
160°-170°	204.0	2.9
170°-180°	70.3	1.0
0°-30°	1070.2	15.4
0°-40°	1741.6	25.1
0°-60°	3103.2	44.8
0°-90°	4283.2	61.8
90°-120°	788.8	11.4
90°-150°	2055.4	29.7
90°-180°	2646.0	38.2
0°-180°	6929.0	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	100	184	238	254	16
95°	50	87	167	218	233	53
105°	176	218	234	179	194	186
115°	315	336	396	438	452	311
125°	437	442	488	521	533	391
135°	542	544	563	592	598	417
145°	624	626	627	640	646	390
155°	685	684	685	687	684	316
165°	722	721	720	725	721	204
175°	740	737	737	741	737	70
180°	740	740	740	740	740	

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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°	20.2	99.9	184.4	238.1	254.3
92.5°	30.8	92.6	173.3	227.1	241.4
95°	50.2	86.7	167.0	217.8	233.0
97.5°	76.1	115.3	158.5	208.3	223.9
100°	106.5	165.9	149.9	198.2	213.9
102.5°	141.2	190.8	163.4	187.6	203.8
105°	175.8	218.3	233.9	179.1	193.8
107.5°	211.1	247.9	318.2	274.5	216.1
110°	246.5	278.1	344.7	366.0	299.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.6	306.7	370.2	413.1	425.6
115°	314.7	336.1	395.7	437.5	451.8
117.5°	348.8	364.7	419.0	459.7	472.4
120°	378.6	391.1	442.7	482.0	492.6
122.5°	410.5	417.3	466.4	502.6	513.7
125°	437.4	441.8	488.0	520.9	532.6
127.5°	466.0	468.9	509.6	541.5	551.0
130°	492.4	495.3	527.8	558.8	566.8
132.5°	516.2	520.6	544.9	574.4	583.4
135°	542.0	543.8	562.7	591.5	597.5
137.5°	564.0	566.9	578.6	605.6	612.0
140°	584.4	587.7	594.0	618.9	625.4
142.5°	604.8	606.6	608.2	629.6	635.5
145°	623.5	625.8	626.9	640.1	646.2
147.5°	640.1	642.8	643.9	649.5	652.9
150°	656.6	658.2	659.3	660.4	661.8
152.5°	671.4	672.0	672.5	674.7	672.0
155°	685.1	684.0	684.6	687.3	684.0
157.5°	696.1	696.1	695.6	698.9	694.5
160°	706.0	705.5	704.9	708.2	704.4
162.5°	715.4	713.7	713.2	717.0	713.7
165°	722.5	720.9	720.3	724.7	720.9
167.5°	728.5	726.3	726.3	730.7	726.3
170°	733.5	731.3	731.3	735.7	731.3
172.5°	736.8	734.0	734.6	739.0	734.0
175°	739.5	736.8	737.3	741.2	736.8
177.5°	740.6	737.9	738.4	742.8	737.3
180°	739.5	739.5	739.5	739.5	739.5

(END OF REPORT)