

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: P1031519

Luminaire Tested: S123DIW-B1165D460UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031519
REPORT IS A COMBINATION OF REPORTS P991108 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

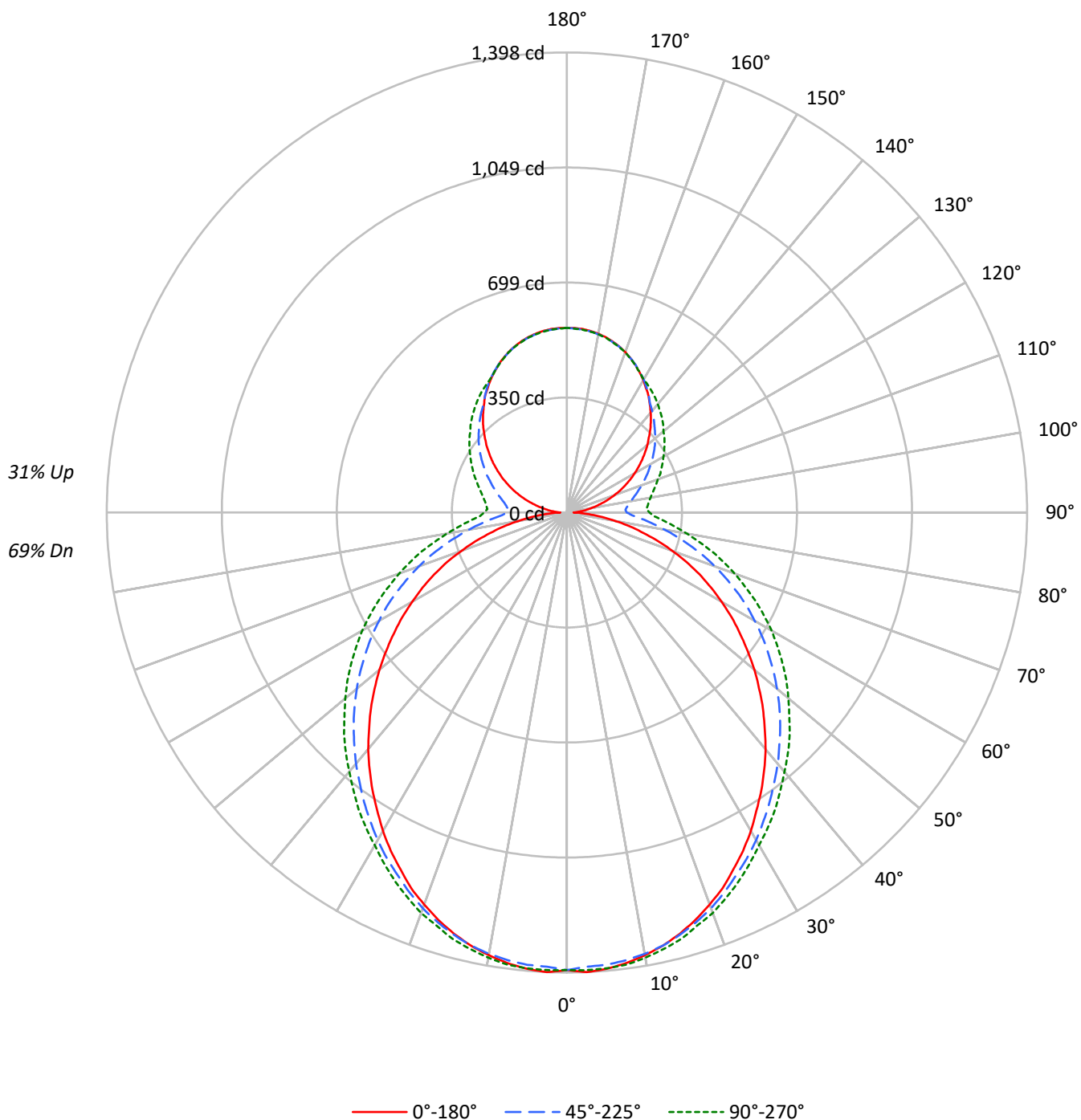
Lumens per Lamp: N/A
Luminaire Lumens: 6228.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	105	105	105	105	94	94	94	83	83	83	73	73	73
1	101	95	91	87	95	90	86	82	80	77	74	71	69	66	63	61	59
2	91	83	76	70	85	78	72	67	69	65	60	62	58	54	54	51	49
3	83	72	64	58	78	68	61	55	61	55	50	54	49	45	48	44	41
4	76	64	55	48	71	60	52	46	54	47	42	48	43	39	42	38	35
5	69	57	48	41	65	54	46	40	48	41	36	43	37	33	38	34	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	34	30	26
7	59	46	37	31	55	44	36	30	39	33	28	35	30	26	31	27	23
8	55	42	33	28	52	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	27	22	30	24	21	27	22	19
10	48	35	27	22	45	33	26	22	30	24	20	27	22	19	25	20	17

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	2.1
10°-20°	376.0	6.0
20°-30°	562.3	9.0
30°-40°	671.4	10.8
40°-50°	702.4	11.3
50°-60°	659.2	10.6
60°-70°	550.6	8.8
70°-80°	393.7	6.3
80°-90°	235.5	3.8
90°-100°	183.3	2.9
100°-110°	217.5	3.5
110°-120°	258.2	4.1
120°-130°	285.9	4.6
130°-140°	293.5	4.7
140°-150°	274.3	4.4
150°-160°	227.7	3.7
160°-170°	151.6	2.4
170°-180°	53.1	0.9
0°-30°	1070.2	17.2
0°-40°	1741.6	28.0
0°-60°	3103.2	49.8
0°-90°	4282.9	68.8
90°-120°	659.0	10.6
90°-150°	1512.7	24.3
90°-180°	1945.0	31.2
0°-180°	6228.0	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	99	182	235	251	16
95°	43	105	183	231	246	42
105°	111	148	218	260	274	118
115°	195	214	268	305	316	193
125°	278	280	323	353	362	249
135°	358	360	376	401	408	276
145°	433	432	434	445	450	270
155°	494	494	494	496	493	227
165°	538	536	536	539	536	152
175°	560	558	558	560	557	53
180°	561	561	561	561	561	

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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°	20.1	98.7	181.8	235.0	251.0
92.5°	31.4	99.2	177.5	228.8	241.6
95°	42.7	104.8	182.6	231.3	246.5
97.5°	57.8	114.6	188.5	236.1	250.7
100°	73.5	124.7	196.6	241.8	257.8
102.5°	91.8	135.6	206.8	250.6	265.2
105°	111.2	148.5	217.6	260.0	274.4
107.5°	132.6	164.9	228.7	270.9	284.1
110°	152.3	180.4	241.8	283.0	294.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.3	195.9	253.4	293.5	307.1
115°	194.8	214.2	268.0	304.7	316.4
117.5°	217.3	229.8	280.4	316.7	327.6
120°	236.5	246.6	294.4	328.9	338.6
122.5°	258.1	262.8	308.9	340.9	350.2
125°	278.5	279.8	322.9	353.0	361.8
127.5°	298.8	299.9	336.9	364.6	373.4
130°	319.0	321.1	350.0	377.1	383.1
132.5°	337.8	341.3	363.1	388.2	396.6
135°	358.5	359.6	375.9	401.3	408.1
137.5°	377.4	378.1	390.1	412.2	418.3
140°	395.8	398.0	403.0	425.3	429.8
142.5°	413.8	414.5	415.4	434.7	440.1
145°	432.8	432.1	433.5	445.1	449.5
147.5°	447.6	449.3	450.6	455.1	458.6
150°	464.7	465.6	466.5	466.5	466.9
152.5°	478.8	480.2	480.6	481.5	479.3
155°	493.8	493.8	494.3	496.0	492.9
157.5°	506.6	506.2	506.6	508.4	505.7
160°	518.5	517.6	517.6	519.8	518.0
162.5°	529.1	527.7	528.2	530.4	527.3
165°	537.9	536.5	536.5	539.2	536.1
167.5°	545.4	543.6	544.0	546.7	544.0
170°	551.5	549.8	549.8	552.8	549.8
172.5°	556.4	554.6	554.6	557.3	554.2
175°	559.5	557.7	557.7	560.3	557.3
177.5°	561.2	559.5	559.5	562.1	559.0
180°	560.8	560.8	560.8	560.8	560.8

(END OF REPORT)