

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: P1031497

Luminaire Tested: S123DIW-B1165D460UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031497
REPORT IS A COMBINATION OF REPORTS P991054 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

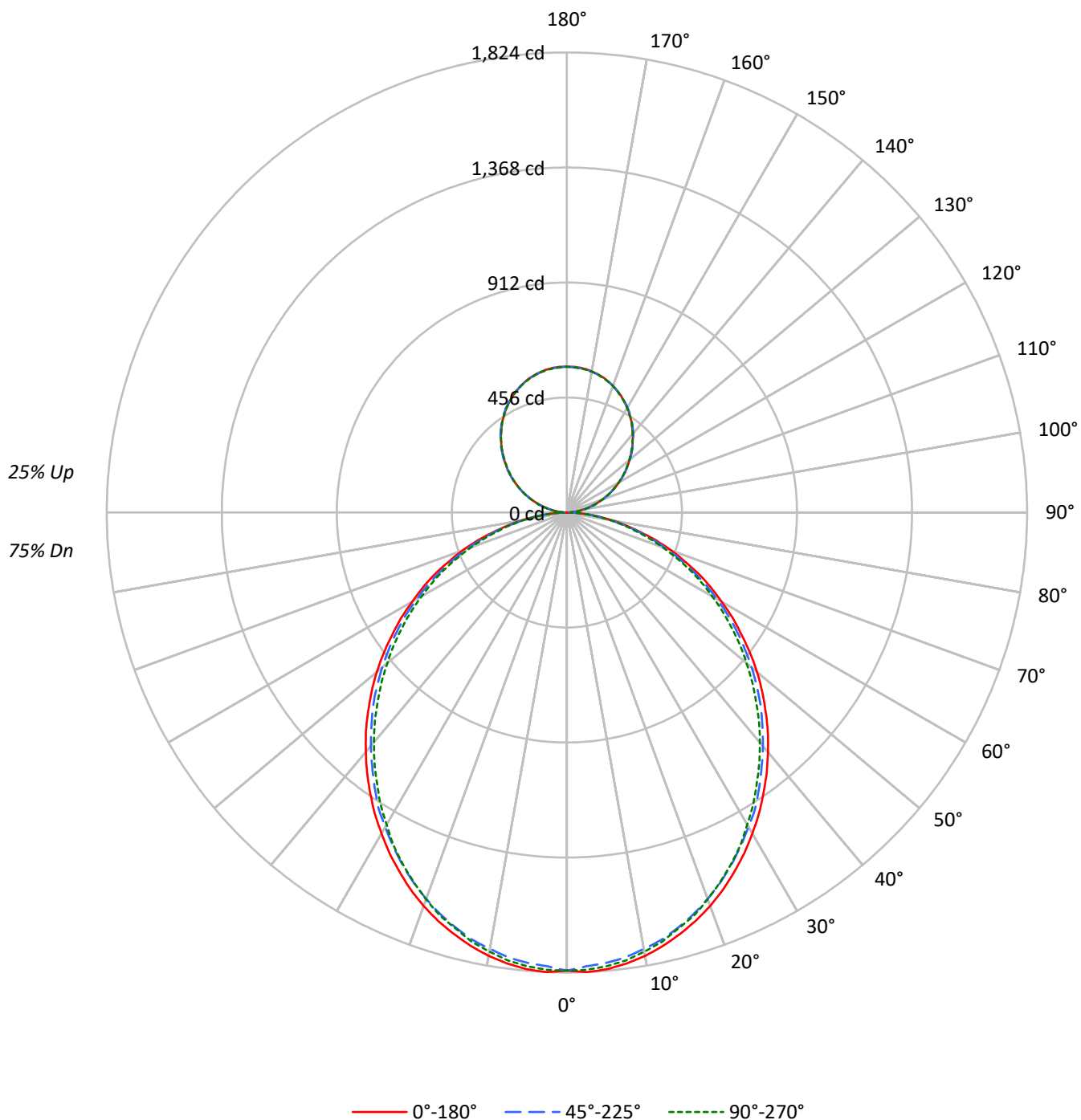
Lumens per Lamp: N/A
Luminaire Lumens: 6330.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79
1	103	99	95	91	98	94	90	87	85	82	80	77	75	73	70	68	66
2	94	86	80	74	89	82	76	71	75	70	66	68	64	61	61	58	56
3	86	76	68	62	81	72	65	60	66	60	56	60	55	51	54	51	48
4	79	67	59	53	74	64	57	51	59	52	47	53	48	44	48	44	41
5	72	60	51	45	68	57	50	44	52	46	41	48	43	38	44	39	36
6	67	54	45	39	63	52	44	38	47	41	36	43	38	34	40	35	31
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	36	32	28
8	57	45	36	31	54	43	35	30	39	33	28	36	31	27	33	29	25
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	31	26	23
10	50	38	30	25	48	36	29	24	33	27	23	31	26	22	29	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19550	19550	19550
5°	19600	18876	18848
10°	19425	18237	18050
15°	19155	17572	17181
20°	18845	16834	16318
25°	18444	16057	15398
30°	18006	15251	14429
35°	17547	14428	13467
40°	17066	13565	12519
45°	16537	12723	11530
50°	15999	11785	10537
55°	15309	10807	9531
60°	14599	9730	8461
65°	13931	8563	7344
70°	12969	7269	6041
75°	11583	5755	4690
80°	10006	4046	3317
85°	7800	2175	1662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16537 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.7
10°-20°	483.5	7.6
20°-30°	714.1	11.3
30°-40°	834.0	13.2
40°-50°	838.4	13.2
50°-60°	736.5	11.6
60°-70°	548.5	8.7
70°-80°	312.1	4.9
80°-90°	90.0	1.4
90°-100°	37.2	0.6
100°-110°	112.6	1.8
110°-120°	191.7	3.0
120°-130°	252.3	4.0
130°-140°	283.5	4.5
140°-150°	278.8	4.4
150°-160°	234.7	3.7
160°-170°	156.2	2.5
170°-180°	54.7	0.9
0°-30°	1368.8	21.6
0°-40°	2202.7	34.8
0°-60°	3777.6	59.7
0°-90°	4728.2	74.7
90°-120°	341.6	5.4
90°-150°	1156.2	18.3
90°-180°	1602.0	25.3
0°-180°	6330.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1818	1810	1793	1808	1805	172
15°	1730	1724	1704	1716	1707	488
25°	1571	1562	1541	1543	1538	724
35°	1359	1349	1329	1320	1312	850
45°	1114	1107	1087	1068	1060	860
55°	845	843	823	806	798	757
65°	576	568	553	540	536	569
75°	304	298	294	286	281	325
85°	81	78	78	75	75	87
90°	0	5	11	13	14	8
95°	27	30	34	35	35	30
105°	102	103	107	107	108	109
115°	193	194	194	194	194	191
125°	282	284	283	281	279	252
135°	366	369	369	367	366	282
145°	445	446	447	446	445	278
155°	509	509	510	511	508	234
165°	554	553	553	556	553	156
175°	577	575	575	578	574	55
180°	578	578	578	578	578	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.3	1816.3	1816.3	1816.3	1816.3
2.5°	1824.1	1817.9	1800.7	1816.3	1814.7
5°	1817.9	1810.0	1792.9	1808.5	1805.4
7.5°	1803.8	1796.0	1778.8	1792.9	1791.3
10°	1785.1	1777.2	1756.9	1771.0	1767.9
12.5°	1760.1	1753.8	1735.1	1744.5	1742.9
15°	1730.4	1724.1	1703.8	1716.3	1707.0
17.5°	1697.6	1689.8	1669.5	1678.9	1675.7
20°	1660.1	1650.7	1630.4	1636.7	1632.0
22.5°	1618.0	1608.6	1588.3	1593.0	1586.7
25°	1571.1	1561.7	1541.4	1543.0	1538.3
27.5°	1522.7	1513.3	1491.5	1493.0	1488.3
30°	1469.6	1461.8	1439.9	1439.9	1429.0
32.5°	1416.5	1405.6	1389.9	1379.0	1374.3
35°	1358.7	1349.3	1329.0	1319.7	1311.9
37.5°	1300.9	1288.4	1268.1	1257.2	1252.5
40°	1240.0	1230.6	1208.8	1196.3	1190.0
42.5°	1179.1	1168.2	1146.3	1133.8	1127.6
45°	1113.5	1107.3	1087.0	1068.2	1060.4
47.5°	1049.5	1040.1	1021.4	1002.6	996.4
50°	983.9	976.1	955.8	938.6	929.2
52.5°	915.2	910.5	888.6	874.6	865.2
55°	844.9	843.3	823.0	805.9	798.0
57.5°	779.3	773.1	757.4	741.8	732.5
60°	707.5	705.9	687.2	673.1	665.3
62.5°	643.4	638.7	620.0	606.0	601.3
65°	576.3	568.5	552.9	540.4	535.7
67.5°	504.4	498.2	485.7	474.8	468.5
70°	440.4	431.0	421.7	410.7	402.9
72.5°	373.3	367.0	356.1	346.7	343.6
75°	304.5	298.3	293.6	285.8	281.1
77.5°	243.6	240.5	234.3	228.0	228.0
80°	184.3	179.6	176.5	174.9	174.9
82.5°	126.5	126.5	126.5	123.4	121.8
85°	81.2	78.1	78.1	75.0	75.0
87.5°	40.6	35.9	34.4	32.8	32.8
90°	0.5	5.0	10.9	12.7	13.6
92.5°	13.6	16.3	19.1	20.4	19.5
95°	26.8	30.0	33.6	35.4	35.4
97.5°	44.0	46.3	49.0	51.3	50.9
100°	61.8	64.5	66.8	68.1	69.0
102.5°	82.2	83.6	86.7	88.1	87.6
105°	102.2	103.1	107.2	107.2	108.1
107.5°	125.8	126.2	128.1	129.4	129.0
110°	147.6	148.5	149.4	151.2	150.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	170.7	170.7	173.0	173.0
115°	193.0	194.4	193.5	193.9	193.5
117.5°	216.2	216.6	215.7	215.7	214.3
120°	237.5	240.2	238.0	237.5	236.6
122.5°	259.8	261.6	260.7	259.3	257.9
125°	282.5	283.8	282.9	281.1	279.3
127.5°	303.3	306.1	305.2	302.4	300.6
130°	324.2	327.9	326.5	324.7	321.5
132.5°	345.1	348.8	347.9	345.6	343.3
135°	366.5	369.2	368.7	366.9	366.0
137.5°	386.0	388.3	389.6	387.4	386.0
140°	406.4	408.7	409.2	408.7	405.5
142.5°	425.1	427.3	428.2	427.8	425.5
145°	444.6	445.5	446.8	446.4	444.6
147.5°	461.4	463.2	464.6	464.6	461.8
150°	479.1	480.0	480.9	480.9	478.2
152.5°	493.6	495.0	495.4	496.3	494.1
155°	509.1	509.1	509.5	511.3	508.2
157.5°	522.2	521.8	522.2	524.0	521.3
160°	534.5	533.6	533.6	535.9	534.0
162.5°	545.4	544.0	544.5	546.8	543.6
165°	554.5	553.1	553.1	555.8	552.7
167.5°	562.2	560.4	560.8	563.6	560.8
170°	568.6	566.7	566.7	569.9	566.7
172.5°	573.5	571.7	571.7	574.5	571.3
175°	576.7	574.9	574.9	577.6	574.5
177.5°	578.5	576.7	576.7	579.5	576.3
180°	578.1	578.1	578.1	578.1	578.1

(END OF REPORT)