

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: P1032055

Luminaire Tested: S123RDIW-B1000D460UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032055
REPORT IS A COMBINATION OF REPORTS P993887 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1000D460UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

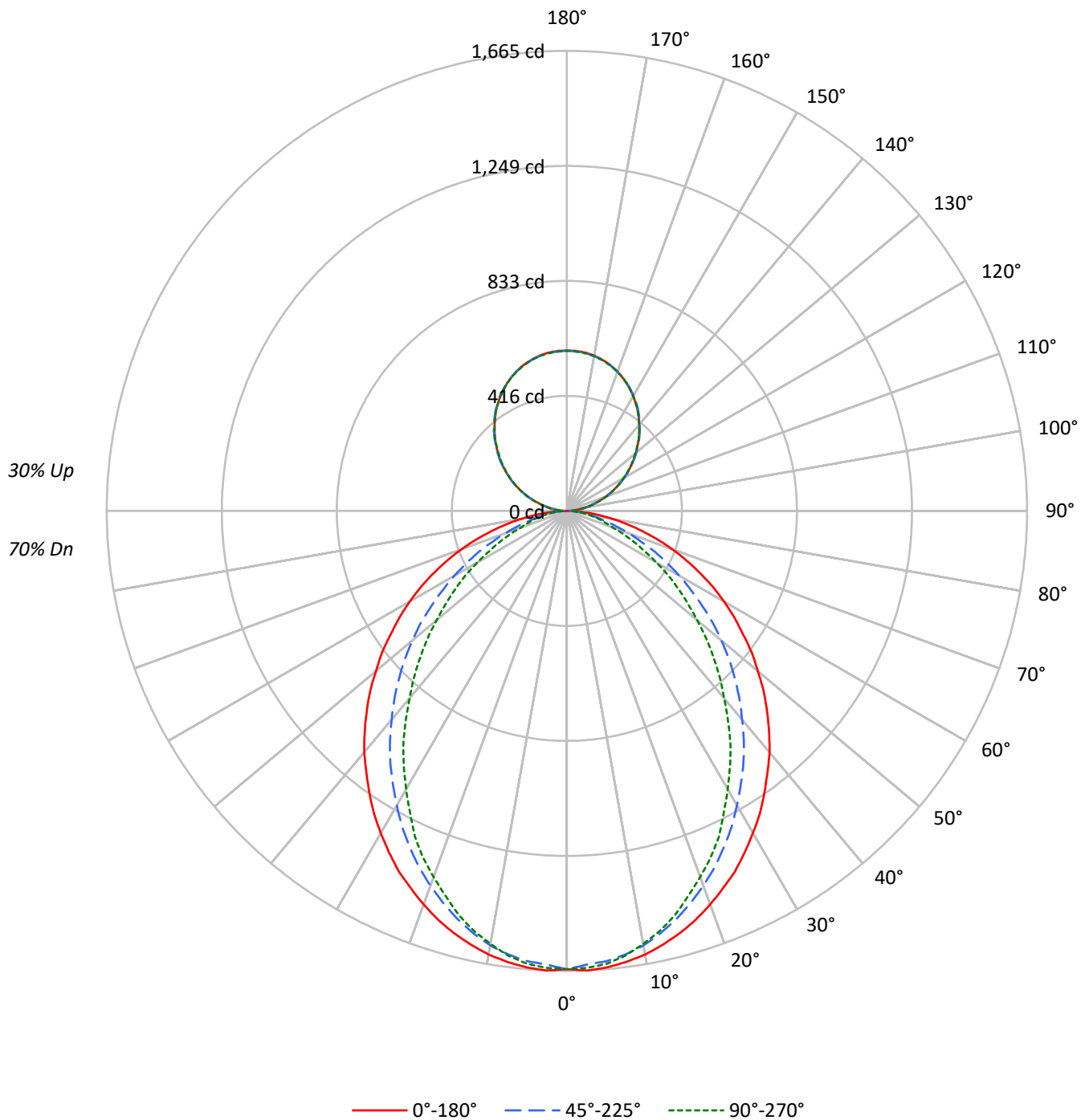
Lumens per Lamp: N/A
Luminaire Lumens: 5355.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	106	106	106	106	94	94	94	84	84	84	74	74	74
1	103	98	95	91	97	93	90	87	84	81	79	75	73	71	67	65	64
2	94	87	80	75	89	82	77	72	74	70	66	66	63	60	59	57	55
3	86	77	69	63	81	73	66	61	66	60	56	59	55	51	53	50	47
4	79	68	60	54	74	65	58	52	59	53	48	53	48	44	47	44	41
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36
6	67	55	47	41	63	52	45	40	48	42	37	43	38	34	39	35	32
7	62	50	42	36	59	48	40	35	44	37	33	40	34	31	36	32	28
8	58	46	38	32	55	44	36	31	40	34	29	36	31	27	33	29	26
9	54	42	34	29	51	40	33	28	37	31	26	34	28	25	31	26	23
10	51	38	31	26	48	37	30	26	34	28	24	31	26	23	28	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17853	17853	17853
5°	17882	17221	17174
10°	17741	16574	16247
15°	17511	15773	15231
20°	17209	14903	14096
25°	16897	13998	13021
30°	16498	13036	11749
35°	16086	12091	10591
40°	15699	11064	9311
45°	15203	10060	8161
50°	14655	8990	6971
55°	14088	7842	5880
60°	13544	6666	4773
65°	12843	5458	3725
70°	11962	4127	2663
75°	10693	2795	2109
80°	9126	1941	1479
85°	6849	1050	776

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15203 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.9	2.9
10°-20°	433.7	8.1
20°-30°	624.5	11.7
30°-40°	703.3	13.1
40°-50°	672.7	12.6
50°-60°	550.7	10.3
60°-70°	371.3	6.9
70°-80°	186.2	3.5
80°-90°	49.9	0.9
90°-100°	37.3	0.7
100°-110°	113.0	2.1
110°-120°	192.4	3.6
120°-130°	253.0	4.7
130°-140°	284.4	5.3
140°-150°	279.6	5.2
150°-160°	235.4	4.4
160°-170°	156.7	2.9
170°-180°	54.9	1.0
0°-30°	1214.2	22.7
0°-40°	1917.4	35.8
0°-60°	3140.8	58.7
0°-90°	3748.2	70.0
90°-120°	342.7	6.4
90°-150°	1159.8	21.7
90°-180°	1607.0	30.0
0°-180°	5355.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1659	1659	1659	1659	1659	
5°	1659	1652	1636	1648	1645	157
15°	1582	1567	1529	1523	1513	446
25°	1439	1406	1344	1316	1301	662
35°	1246	1197	1114	1056	1032	780
45°	1024	963	860	783	751	790
55°	778	712	597	519	492	697
65°	531	457	352	286	272	526
75°	281	217	143	129	126	300
85°	71	42	38	35	35	78
90°	0	5	11	13	14	6
95°	27	30	34	36	36	30
105°	102	103	108	108	108	110
115°	194	195	194	194	194	192
125°	283	285	284	282	280	253
135°	368	370	370	368	367	283
145°	446	447	448	448	446	279
155°	511	511	511	513	510	235
165°	556	555	555	558	554	157
175°	578	577	577	579	576	55
180°	580	580	580	580	580	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1658.6	1658.6	1658.6	1658.6	1658.6
2.5°	1665.3	1659.9	1643.8	1658.6	1655.9
5°	1658.6	1651.8	1635.7	1647.8	1645.1
7.5°	1646.5	1639.7	1619.6	1627.6	1623.6
10°	1630.3	1620.9	1596.7	1598.0	1591.3
12.5°	1607.5	1596.7	1565.8	1564.4	1556.3
15°	1581.9	1567.1	1529.4	1522.7	1513.3
17.5°	1551.0	1534.8	1487.7	1474.3	1460.8
20°	1516.0	1494.5	1443.3	1425.9	1409.7
22.5°	1477.0	1451.4	1396.3	1373.4	1358.6
25°	1439.3	1405.7	1343.8	1315.6	1300.8
27.5°	1393.6	1357.3	1290.0	1252.3	1229.5
30°	1346.5	1306.1	1230.8	1185.1	1163.6
32.5°	1299.4	1252.3	1171.6	1120.5	1097.6
35°	1245.6	1197.2	1113.8	1055.9	1031.7
37.5°	1191.8	1139.3	1051.9	987.3	957.7
40°	1140.7	1081.5	986.0	916.0	885.1
42.5°	1082.8	1023.7	924.1	846.1	819.2
45°	1023.7	963.1	859.5	782.9	750.6
47.5°	965.8	898.6	796.3	712.9	684.7
50°	901.2	838.0	729.1	645.7	614.7
52.5°	843.4	773.5	665.8	578.4	551.5
55°	777.5	711.6	597.2	519.2	492.3
57.5°	718.3	647.0	531.3	457.4	434.5
60°	656.4	582.4	470.8	398.2	375.3
62.5°	594.6	520.6	408.9	341.7	317.5
65°	531.3	457.4	352.4	286.5	271.7
67.5°	468.1	392.8	290.6	240.8	224.6
70°	406.2	333.6	239.4	192.4	177.6
72.5°	344.4	273.1	189.7	153.3	149.3
75°	281.1	216.6	142.6	129.1	126.4
77.5°	223.3	164.1	111.6	103.6	100.9
80°	168.1	113.0	84.7	80.7	78.0
82.5°	115.7	69.9	60.5	56.5	56.5
85°	71.3	41.7	37.7	35.0	35.0
87.5°	32.3	17.5	17.5	16.1	14.8
90°	0.5	5.0	10.9	12.8	13.7
92.5°	13.7	16.4	19.1	20.5	19.6
95°	26.9	30.1	33.7	35.5	35.5
97.5°	44.2	46.5	49.2	51.5	51.0
100°	62.0	64.7	67.0	68.3	69.2
102.5°	82.5	83.8	87.0	88.4	87.9
105°	102.5	103.4	107.5	107.5	108.4
107.5°	126.2	126.6	128.5	129.8	129.4
110°	148.0	149.0	149.9	151.7	150.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.8	171.3	171.3	173.6	173.6
115°	193.6	195.0	194.1	194.5	194.1
117.5°	216.8	217.3	216.4	216.4	215.0
120°	238.2	241.0	238.7	238.2	237.3
122.5°	260.6	262.4	261.5	260.1	258.7
125°	283.3	284.7	283.8	282.0	280.2
127.5°	304.3	307.0	306.1	303.4	301.6
130°	325.2	328.9	327.5	325.7	322.5
132.5°	346.2	349.8	348.9	346.7	344.4
135°	367.6	370.3	369.9	368.1	367.2
137.5°	387.2	389.5	390.8	388.6	387.2
140°	407.7	410.0	410.4	410.0	406.8
142.5°	426.4	428.7	429.6	429.1	426.8
145°	446.0	446.9	448.2	447.8	446.0
147.5°	462.8	464.6	466.0	466.0	463.3
150°	480.6	481.5	482.4	482.4	479.7
152.5°	495.2	496.5	497.0	497.9	495.6
155°	510.7	510.7	511.1	512.9	509.7
157.5°	523.9	523.4	523.9	525.7	523.0
160°	536.2	535.2	535.2	537.5	535.7
162.5°	547.1	545.7	546.2	548.5	545.3
165°	556.2	554.8	554.8	557.6	554.4
167.5°	563.9	562.1	562.6	565.3	562.6
170°	570.3	568.5	568.5	571.7	568.5
172.5°	575.3	573.5	573.5	576.2	573.1
175°	578.5	576.7	576.7	579.4	576.2
177.5°	580.3	578.5	578.5	581.3	578.1
180°	579.9	579.9	579.9	579.9	579.9

(END OF REPORT)