

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: P1037496

Luminaire Tested: S123RDS-B1000DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDS-B1000DB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

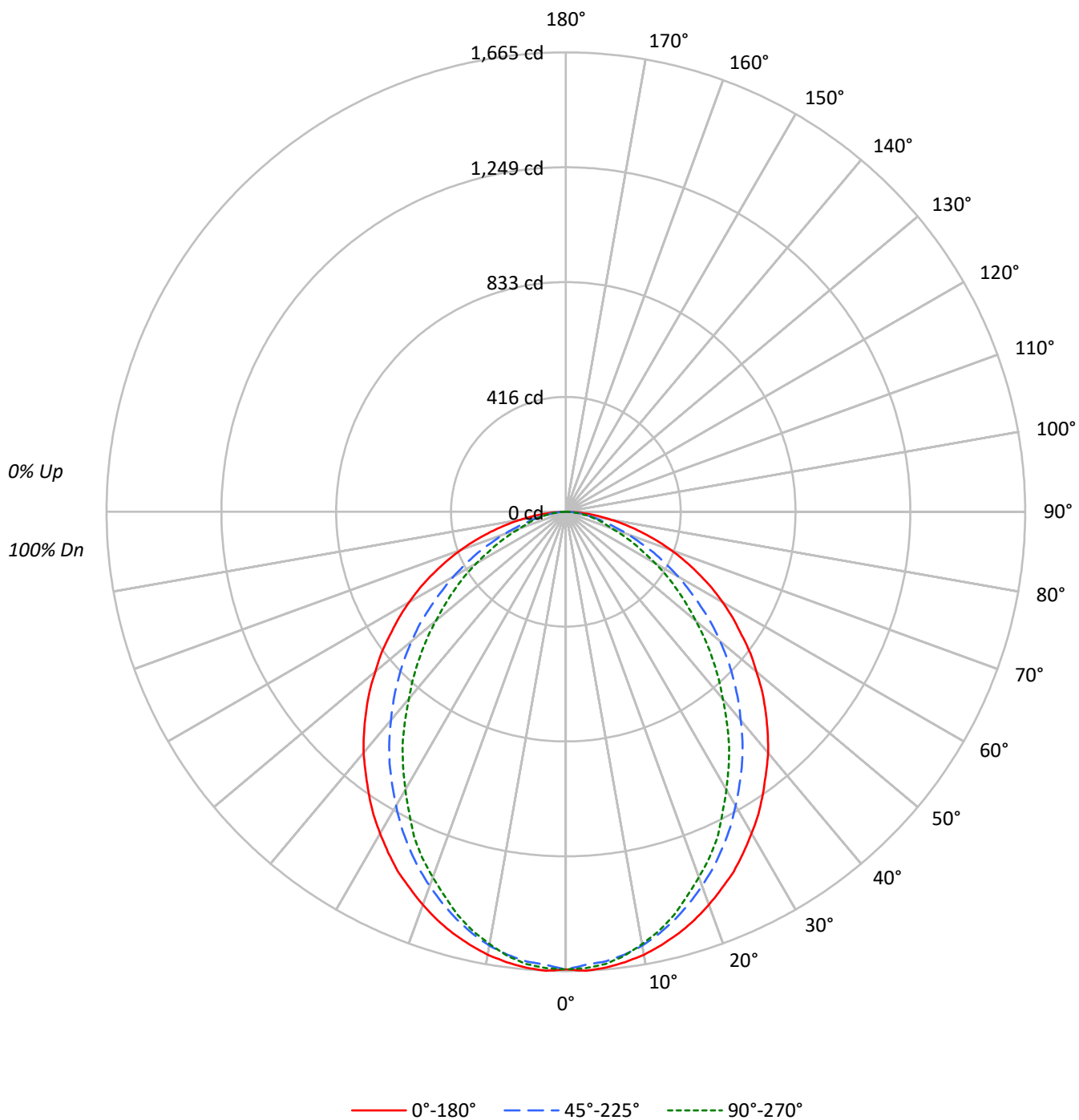
Lumens per Lamp: N/A
Luminaire Lumens: 3747.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17853	17853	17853
5°	17921	17674	17775
10°	17819	17452	17393
15°	17628	17043	16864
20°	17365	16533	16148
25°	17094	15960	15449
30°	16736	15298	14462
35°	16368	14636	13557
40°	16028	13855	12437
45°	15583	13084	11426
50°	15091	12209	10294
55°	14591	11207	9239
60°	14131	10135	8079
65°	13532	8975	6920
70°	12784	7534	5589
75°	11691	5931	5257
80°	10420	5250	4835
85°	8806	4656	4323

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15583 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.9	4.2
10°-20°	433.7	11.6
20°-30°	624.5	16.7
30°-40°	703.3	18.8
40°-50°	672.7	18.0
50°-60°	550.7	14.7
60°-70°	371.3	9.9
70°-80°	186.2	5.0
80°-90°	48.7	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1214.2	32.4
0°-40°	1917.4	51.2
0°-60°	3140.8	83.8
0°-90°	3747.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3747.0	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	83
90°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)