

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: P992333

Luminaire Tested: S123DR-B1000DB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P992333
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DR-B1000DB2750-4F0-XX-W2A-F_3000K
Description: Define 3 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

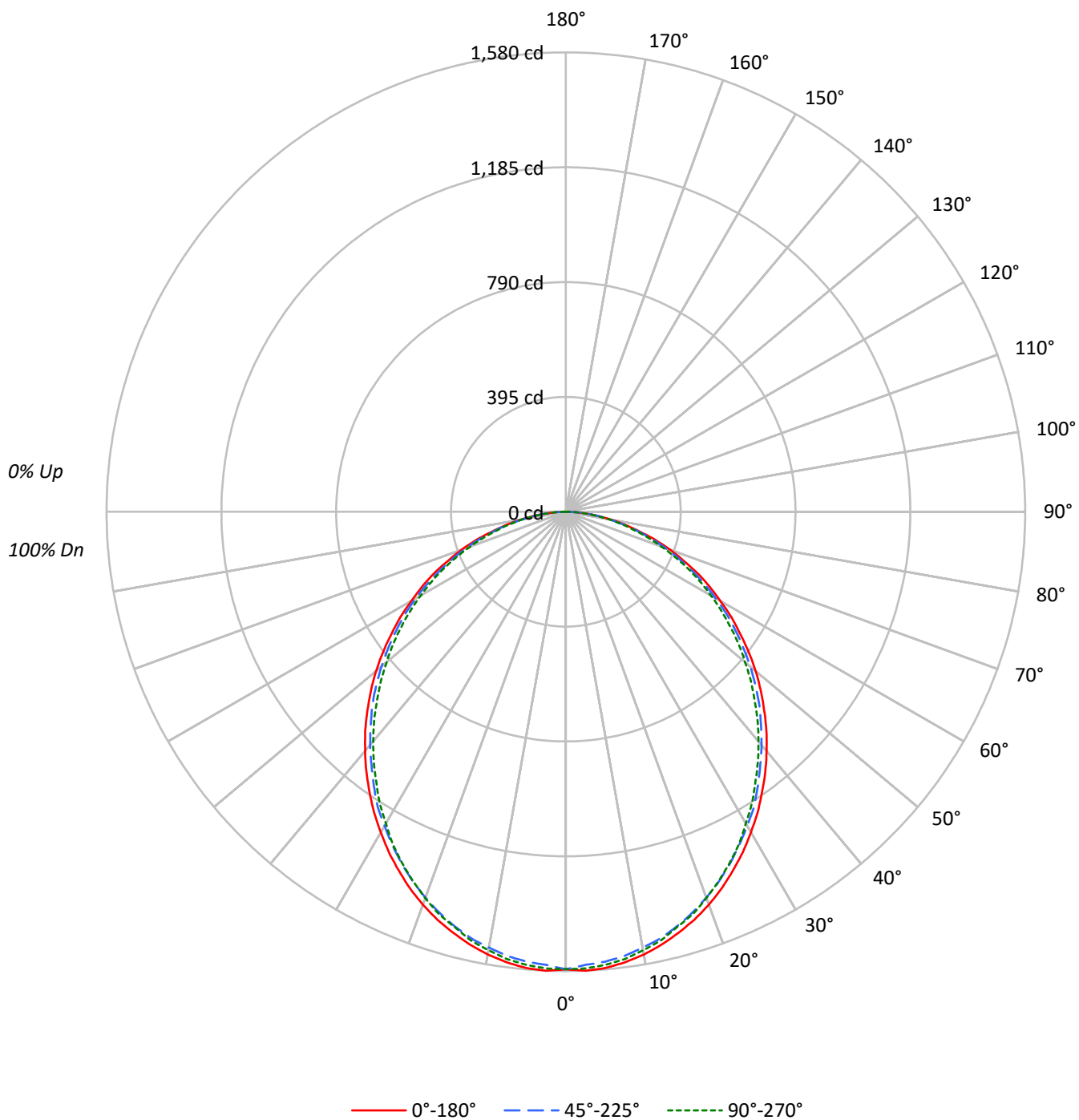
Lumens per Lamp: N/A
Luminaire Lumens: 4095.0 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	53	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	46	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	41	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16937	16937	16937
5°	17016	16782	16899
10°	16902	16635	16739
15°	16704	16448	16478
20°	16474	16180	16195
25°	16164	15859	15827
30°	15823	15504	15386
35°	15466	15128	14934
40°	15094	14715	14485
45°	14684	14333	13983
50°	14272	13865	13480
55°	13735	13380	12973
60°	13194	12816	12406
65°	12714	12197	11820
70°	12006	11497	10987
75°	10971	10580	10127
80°	9893	9478	9391
85°	8695	8349	8015

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14684 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	3.6
10°-20°	418.8	10.2
20°-30°	618.6	15.1
30°-40°	722.5	17.6
40°-50°	726.3	17.7
50°-60°	638.0	15.6
60°-70°	475.2	11.6
70°-80°	270.4	6.6
80°-90°	76.9	1.9
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°	1185.8	29.0
0°-40°	1908.2	46.6
0°-60°	3272.5	79.9
0°-90°	4095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1575	1568	1553	1567	1564	149
15°	1499	1494	1476	1487	1479	423
25°	1361	1353	1335	1337	1333	627
35°	1177	1169	1151	1143	1136	736
45°	965	959	942	925	919	745
55°	732	731	713	698	691	656
65°	499	492	479	468	464	493
75°	264	258	254	248	244	282
85°	70	68	68	65	65	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1573.5	1573.5	1573.5	1573.5	1573.5
2.5°	1580.2	1574.8	1559.9	1573.5	1572.1
5°	1574.8	1568.0	1553.2	1566.7	1564.0
7.5°	1562.6	1555.9	1541.0	1553.2	1551.8
10°	1546.4	1539.6	1522.0	1534.2	1531.5
12.5°	1524.7	1519.3	1503.1	1511.2	1509.9
15°	1499.0	1493.6	1476.0	1486.9	1478.7
17.5°	1470.6	1463.9	1446.3	1454.4	1451.7
20°	1438.2	1430.0	1412.5	1417.9	1413.8
22.5°	1401.6	1393.5	1375.9	1380.0	1374.6
25°	1361.0	1352.9	1335.3	1336.7	1332.6
27.5°	1319.1	1311.0	1292.0	1293.4	1289.3
30°	1273.1	1266.3	1247.4	1247.4	1237.9
32.5°	1227.1	1217.6	1204.1	1194.6	1190.6
35°	1177.0	1168.9	1151.3	1143.2	1136.5
37.5°	1127.0	1116.2	1098.6	1089.1	1085.0
40°	1074.2	1066.1	1047.2	1036.3	1030.9
42.5°	1021.5	1012.0	993.0	982.2	976.8
45°	964.6	959.2	941.6	925.4	918.6
47.5°	909.2	901.0	884.8	868.6	863.2
50°	852.3	845.6	828.0	813.1	805.0
52.5°	792.8	788.8	769.8	757.6	749.5
55°	731.9	730.6	713.0	698.1	691.3
57.5°	675.1	669.7	656.2	642.6	634.5
60°	612.9	611.5	595.3	583.1	576.3
62.5°	557.4	553.3	537.1	524.9	520.9
65°	499.2	492.5	478.9	468.1	464.1
67.5°	437.0	431.6	420.8	411.3	405.9
70°	381.5	373.4	365.3	355.8	349.1
72.5°	323.3	317.9	308.5	300.3	297.6
75°	263.8	258.4	254.4	247.6	243.5
77.5°	211.1	208.4	202.9	197.5	197.5
80°	159.6	155.6	152.9	151.5	151.5
82.5°	109.6	109.6	109.6	106.9	105.5
85°	70.4	67.6	67.6	64.9	64.9
87.5°	35.2	31.1	29.8	28.4	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)