

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P997701

Luminaire Tested: SA2XXRDP-B1005DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997701
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B1005DB40-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

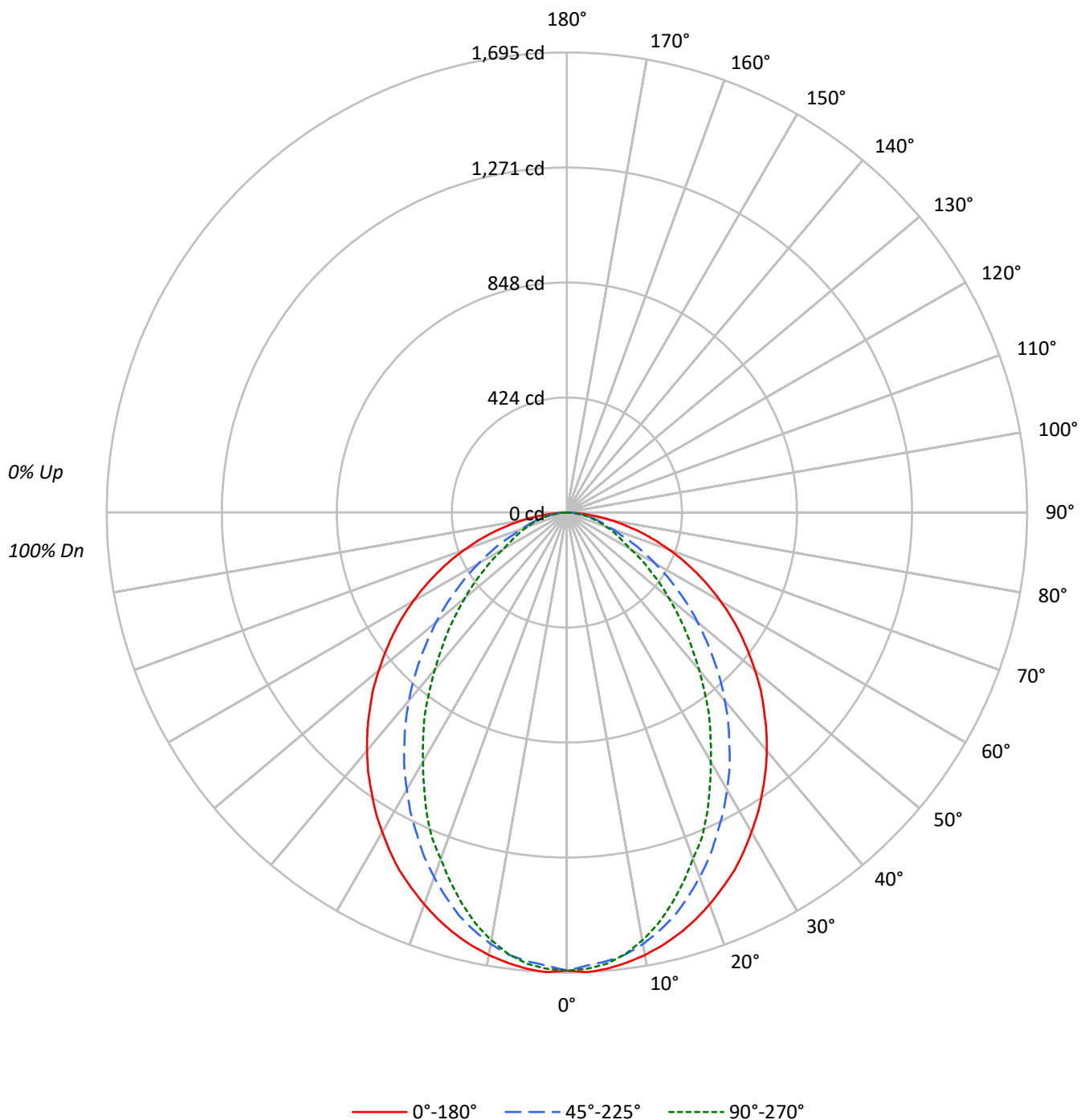
Lumens per Lamp: N/A
Luminaire Lumens: 3471.0 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26715	26715	26715
5°	26817	26380	26526
10°	26611	25949	25729
15°	26306	25180	24454
20°	25883	24082	22872
25°	25449	22835	21341
30°	24845	21552	19375
35°	24261	20159	17651
40°	23670	18715	15655
45°	22977	17096	13848
50°	22267	15458	12074
55°	21540	13699	10368
60°	20695	11847	8608
65°	19735	9956	7836
70°	18591	8201	7211
75°	17186	7474	6728
80°	15178	6682	6126
85°	11932	5267	5267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 22977 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.2	4.6
10°-20°	434.2	12.5
20°-30°	609.6	17.6
30°-40°	664.5	19.1
40°-50°	610.8	17.6
50°-60°	479.7	13.8
60°-70°	312.2	9.0
70°-80°	160.7	4.6
80°-90°	41.0	1.2
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°	1202.0	34.6
0°-40°	1866.6	53.8
0°-60°	2957.0	85.2
0°-90°	3471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1688	1680	1660	1674	1669	160
15°	1605	1588	1536	1508	1492	452
25°	1457	1408	1307	1245	1222	670
35°	1256	1178	1043	947	913	786
45°	1026	924	764	655	619	793
55°	780	661	496	405	376	697
65°	527	403	266	214	209	522
75°	281	174	122	112	110	297
85°	66	34	29	29	29	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1687.7	1687.7	1687.7	1687.7	1687.7
2.5°	1695.4	1687.7	1670.9	1686.2	1683.1
5°	1687.7	1680.1	1660.2	1674.0	1669.4
7.5°	1674.0	1664.8	1643.4	1649.5	1641.9
10°	1655.6	1644.9	1614.4	1609.8	1600.7
12.5°	1632.7	1619.0	1577.7	1568.6	1551.8
15°	1605.2	1588.4	1536.5	1507.5	1492.2
17.5°	1573.2	1548.7	1484.6	1451.0	1426.5
20°	1536.5	1506.0	1429.6	1391.4	1357.8
22.5°	1496.8	1461.7	1373.1	1321.2	1298.2
25°	1457.1	1408.2	1307.4	1244.8	1221.9
27.5°	1409.7	1357.8	1246.3	1174.5	1139.4
30°	1359.3	1301.3	1179.1	1101.2	1060.0
32.5°	1310.5	1240.2	1115.0	1023.3	985.1
35°	1255.5	1177.6	1043.2	947.0	913.4
37.5°	1202.0	1118.0	976.0	870.6	832.4
40°	1145.5	1053.9	905.7	797.3	757.6
42.5°	1087.5	989.7	835.5	722.4	684.2
45°	1026.4	924.0	763.7	655.2	618.6
47.5°	968.3	859.9	694.9	586.5	552.9
50°	904.2	795.7	627.7	522.4	490.3
52.5°	841.6	727.0	563.6	462.8	433.8
55°	780.5	661.3	496.4	404.7	375.7
57.5°	717.9	595.7	436.8	351.3	326.9
60°	653.7	531.5	374.2	296.3	271.9
62.5°	591.1	468.9	320.7	247.4	235.2
65°	526.9	403.2	265.8	213.8	209.2
67.5°	465.8	342.1	213.8	187.9	183.3
70°	401.7	282.6	177.2	161.9	155.8
72.5°	340.6	227.6	148.2	135.9	132.9
75°	281.0	174.1	122.2	111.5	110.0
77.5°	221.5	123.7	96.2	90.1	87.1
80°	166.5	88.6	73.3	67.2	67.2
82.5°	116.1	59.6	50.4	47.3	47.3
85°	65.7	33.6	29.0	29.0	29.0
87.5°	24.4	12.2	12.2	10.7	10.7
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	22.65	24.17	23.01	24.48	24.80	18.61	20.13	18.97	20.44	20.76
	3H	24.41	25.78	24.79	26.11	26.47	19.88	21.24	20.25	21.57	21.93
	4H	25.08	26.36	25.48	26.71	27.09	20.38	21.66	20.78	22.01	22.38
	6H	25.57	26.75	25.98	27.12	27.51	20.76	21.94	21.17	22.31	22.70
	8H	25.73	26.86	26.16	27.25	27.65	20.88	22.01	21.31	22.40	22.80
	12H	25.84	26.92	26.27	27.30	27.73	20.96	22.04	21.39	22.42	22.85
4H	2H	22.75	24.03	23.15	24.38	24.76	19.30	20.59	19.70	20.93	21.31
	3H	24.69	25.75	25.10	26.15	26.55	20.75	21.81	21.16	22.21	22.61
	4H	25.44	26.39	25.87	26.81	27.25	21.35	22.30	21.78	22.72	23.16
	6H	26.03	26.86	26.48	27.30	27.76	21.84	22.67	22.29	23.11	23.57
	8H	26.24	27.02	26.71	27.46	27.93	22.00	22.78	22.46	23.22	23.69
	12H	26.40	27.09	26.88	27.57	28.04	22.11	22.81	22.60	23.29	23.76
8H	4H	25.46	26.24	25.92	26.68	27.15	21.70	22.48	22.17	22.92	23.39
	6H	26.10	26.74	26.59	27.23	27.71	22.29	22.93	22.78	23.42	23.90
	8H	26.35	26.92	26.86	27.43	27.92	22.51	23.09	23.02	23.60	24.08
	12H	26.55	27.06	27.06	27.55	28.12	22.69	23.20	23.20	23.69	24.25
12H	4H	25.44	26.14	25.93	26.62	27.09	21.75	22.44	22.23	22.92	23.39
	6H	26.08	26.66	26.59	27.17	27.65	22.35	22.93	22.87	23.44	23.93
	8H	26.36	26.87	26.87	27.36	27.93	22.62	23.13	23.13	23.63	24.19