

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: P997703

Luminaire Tested: SA2XXRDP-B1005DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997703
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-B1005DB50-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

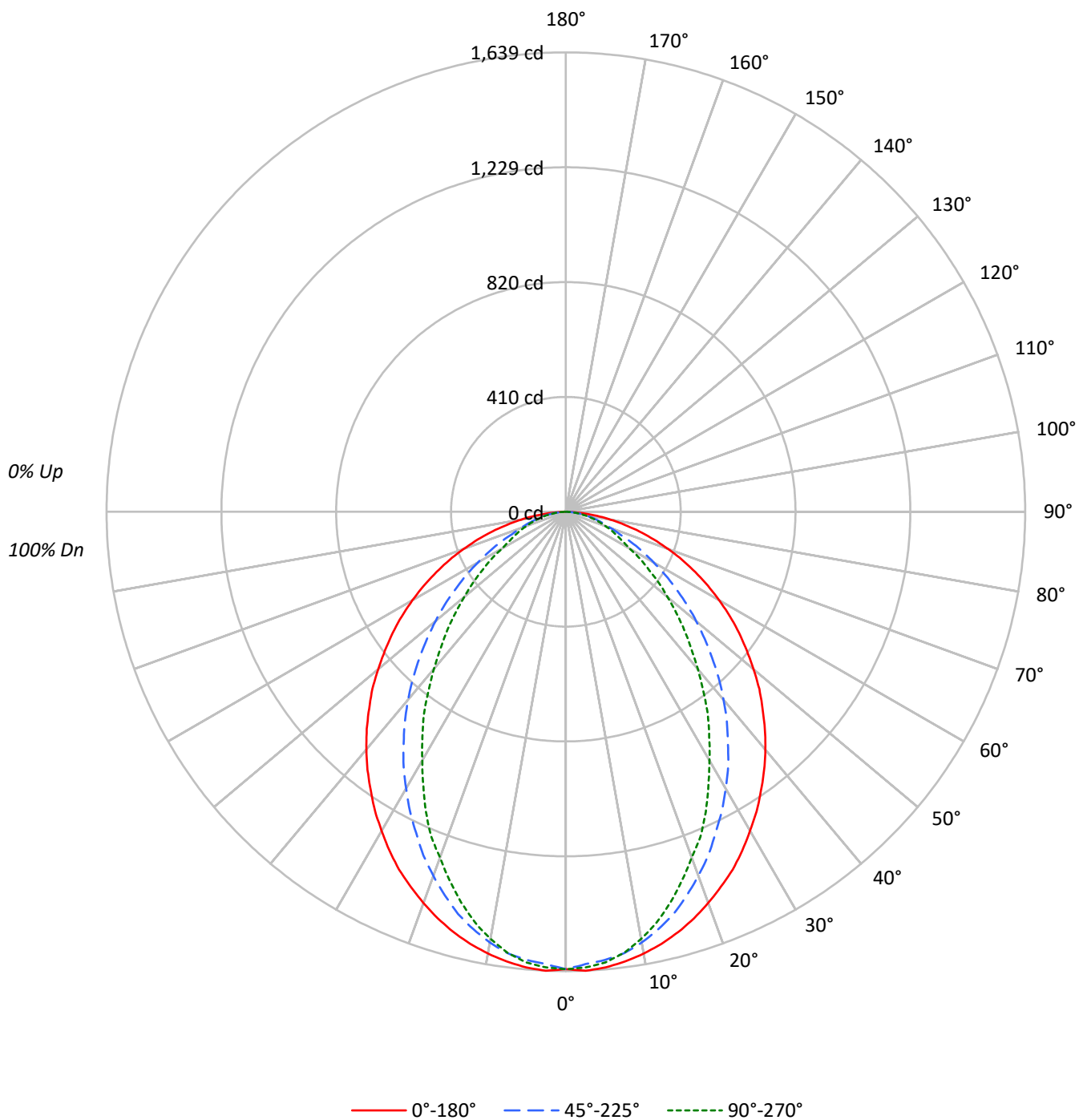
Lumens per Lamp: N/A
Luminaire Lumens: 3356.0 lumens
Efficiency: N/A
Efficacy: 54.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	25830	25830	25830
5°	25929	25506	25648
10°	25730	25089	24875
15°	25435	24346	23644
20°	25025	23283	22114
25°	24606	22078	20634
30°	24023	20837	18733
35°	23457	19490	17065
40°	22887	18095	15136
45°	22216	16530	13389
50°	21528	14946	11673
55°	20825	13244	10026
60°	20008	11454	8323
65°	19083	9626	7577
70°	17976	7928	6970
75°	16617	7223	6501
80°	14676	6463	5925
85°	11533	5104	5104

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 22216 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	4.6
10°-20°	419.8	12.5
20°-30°	589.4	17.6
30°-40°	642.5	19.1
40°-50°	590.5	17.6
50°-60°	463.8	13.8
60°-70°	301.9	9.0
70°-80°	155.4	4.6
80°-90°	39.7	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°	1162.2	34.6
0°-40°	1804.7	53.8
0°-60°	2859.0	85.2
0°-90°	3356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3356.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1632	1632	1632	1632	1632	
5°	1632	1624	1605	1618	1614	155
15°	1552	1536	1486	1458	1443	437
25°	1409	1362	1264	1204	1181	648
35°	1214	1139	1009	916	883	760
45°	992	893	738	634	598	766
55°	755	639	480	391	363	674
65°	510	390	257	207	202	505
75°	272	168	118	108	106	287
85°	64	32	28	28	28	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1631.8	1631.8	1631.8	1631.8	1631.8
2.5°	1639.2	1631.8	1615.6	1630.3	1627.4
5°	1631.8	1624.4	1605.2	1618.5	1614.1
7.5°	1618.5	1609.6	1589.0	1594.9	1587.5
10°	1600.8	1590.4	1560.9	1556.5	1547.6
12.5°	1578.6	1565.3	1525.5	1516.6	1500.4
15°	1552.1	1535.8	1485.6	1457.5	1442.8
17.5°	1521.0	1497.4	1435.4	1402.9	1379.3
20°	1485.6	1456.1	1382.2	1345.3	1312.8
22.5°	1447.2	1413.2	1327.6	1277.4	1255.2
25°	1408.8	1361.6	1264.1	1203.5	1181.4
27.5°	1363.0	1312.8	1205.0	1135.6	1101.6
30°	1314.3	1258.2	1140.0	1064.7	1024.9
32.5°	1267.0	1199.1	1078.0	989.4	952.5
35°	1213.9	1138.6	1008.6	915.6	883.1
37.5°	1162.2	1081.0	943.6	841.7	804.8
40°	1107.6	1019.0	875.7	770.9	732.5
42.5°	1051.4	956.9	807.8	698.5	661.6
45°	992.4	893.4	738.4	633.5	598.1
47.5°	936.3	831.4	671.9	567.1	534.6
50°	874.2	769.4	606.9	505.0	474.0
52.5°	813.7	702.9	544.9	447.5	419.4
55°	754.6	639.4	479.9	391.3	363.3
57.5°	694.1	575.9	422.3	339.7	316.0
60°	632.0	513.9	361.8	286.5	262.9
62.5°	571.5	453.4	310.1	239.2	227.4
65°	509.5	389.9	257.0	206.7	202.3
67.5°	450.4	330.8	206.7	181.6	177.2
70°	388.4	273.2	171.3	156.5	150.6
72.5°	329.3	220.0	143.2	131.4	128.5
75°	271.7	168.3	118.1	107.8	106.3
77.5°	214.1	119.6	93.0	87.1	84.2
80°	161.0	85.7	70.9	65.0	65.0
82.5°	112.2	57.6	48.7	45.8	45.8
85°	63.5	32.5	28.1	28.1	28.1
87.5°	23.6	11.8	11.8	10.3	10.3
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	22.53	24.05	22.90	24.37	24.68	18.49	20.01	18.86	20.33	20.64
	3H	24.30	25.66	24.67	25.99	26.35	19.76	21.12	20.14	21.45	21.81
	4H	24.96	26.24	25.36	26.59	26.97	20.26	21.54	20.66	21.89	22.27
	6H	25.45	26.64	25.86	27.00	27.39	20.64	21.82	21.05	22.19	22.58
	8H	25.62	26.74	26.04	27.13	27.53	20.76	21.89	21.19	22.28	22.68
	12H	25.72	26.80	26.15	27.18	27.61	20.85	21.92	21.28	22.31	22.74
4H	2H	22.64	23.92	23.04	24.26	24.64	19.19	20.47	19.59	20.82	21.20
	3H	24.57	25.63	24.98	26.03	26.43	20.63	21.69	21.04	22.09	22.49
	4H	25.32	26.28	25.75	26.69	27.13	21.23	22.19	21.66	22.60	23.04
	6H	25.91	26.74	26.37	27.18	27.64	21.72	22.55	22.18	22.99	23.45
	8H	26.12	26.90	26.59	27.35	27.81	21.88	22.66	22.34	23.10	23.57
	12H	26.28	26.97	26.76	27.45	27.92	22.00	22.69	22.48	23.17	23.64
8H	4H	25.34	26.12	25.81	26.56	27.03	21.58	22.36	22.05	22.81	23.27
	6H	25.98	26.62	26.48	27.11	27.59	22.17	22.81	22.67	23.30	23.78
	8H	26.23	26.81	26.74	27.32	27.80	22.39	22.97	22.91	23.48	23.97
	12H	26.43	26.94	26.94	27.44	28.00	22.57	23.08	23.08	23.57	24.14
12H	4H	25.33	26.02	25.81	26.50	26.97	21.63	22.32	22.11	22.80	23.27
	6H	25.96	26.54	26.47	27.05	27.54	22.23	22.81	22.75	23.32	23.81
	8H	26.25	26.76	26.76	27.25	27.81	22.51	23.02	23.02	23.51	24.07