

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: P997745

Luminaire Tested: SA2XXRDP-B675DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997745
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-B675DB27-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

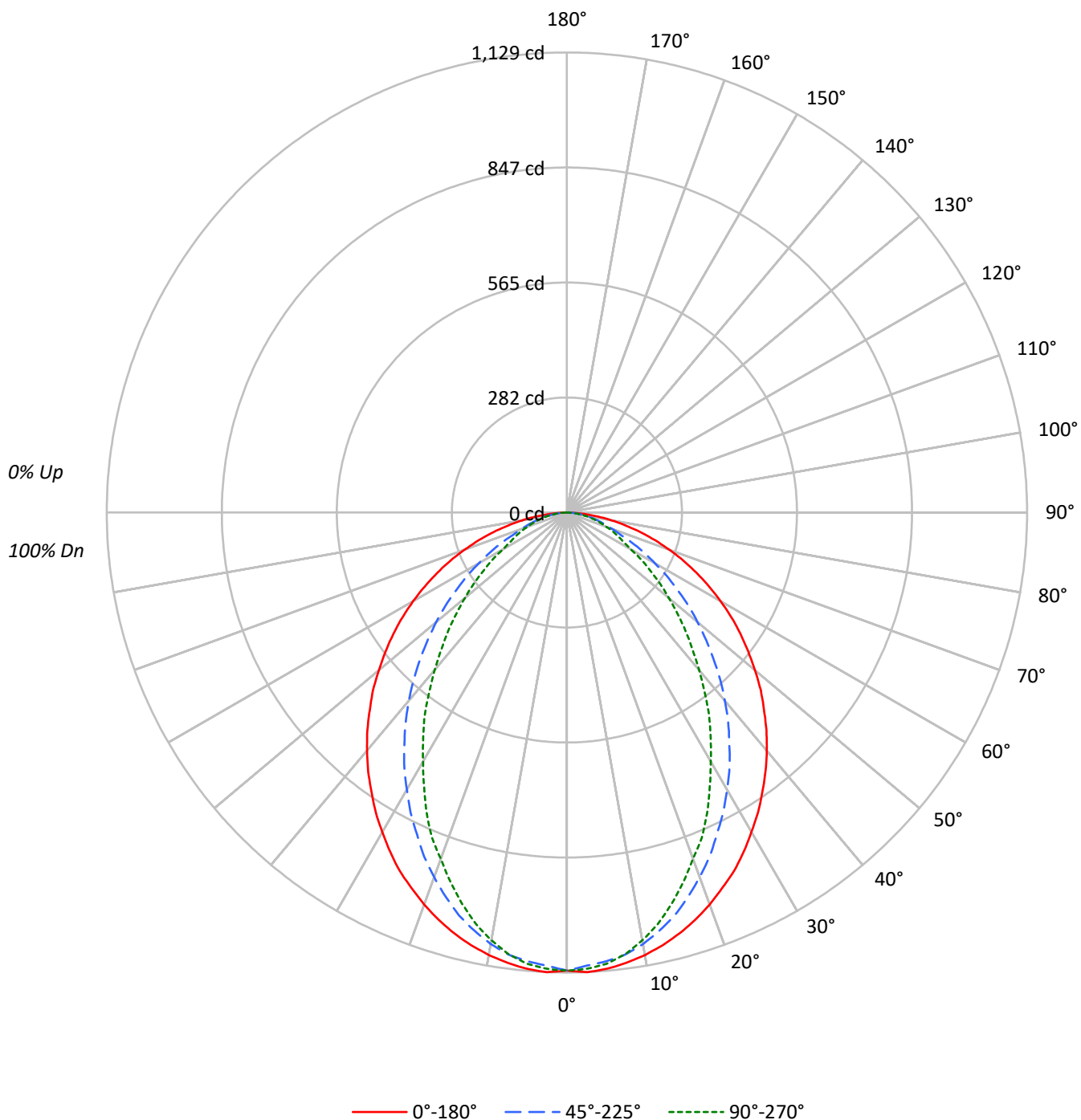
Lumens per Lamp: N/A
Luminaire Lumens: 2312.0 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
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°	17795	17795	17795
5°	17863	17572	17669
10°	17726	17284	17138
15°	17522	16773	16288
20°	17241	16040	15235
25°	16952	15211	14215
30°	16549	14356	12904
35°	16161	13426	11757
40°	15766	12466	10427
45°	15305	11388	9223
50°	14832	10296	8043
55°	14348	9124	6908
60°	13784	7892	5733
65°	13147	6630	5221
70°	12385	5461	4804
75°	11449	4978	4477
80°	10109	4448	4084
85°	7937	3505	3505

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15305 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	4.6
10°-20°	289.2	12.5
20°-30°	406.1	17.6
30°-40°	442.6	19.1
40°-50°	406.8	17.6
50°-60°	319.5	13.8
60°-70°	208.0	9.0
70°-80°	107.1	4.6
80°-90°	27.3	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°	800.7	34.6
0°-40°	1243.3	53.8
0°-60°	1969.7	85.2
0°-90°	2312.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2312.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1124	1124	1124	1124	1124	
5°	1124	1119	1106	1115	1112	107
15°	1069	1058	1024	1004	994	301
25°	971	938	871	829	814	446
35°	836	784	695	631	608	523
45°	684	616	509	436	412	528
55°	520	440	331	270	250	465
65°	351	269	177	142	139	348
75°	187	116	81	74	73	198
85°	44	22	19	19	19	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1124.2	1124.2	1124.2	1124.2	1124.2
2.5°	1129.3	1124.2	1113.0	1123.2	1121.1
5°	1124.2	1119.1	1105.9	1115.0	1112.0
7.5°	1115.0	1108.9	1094.7	1098.7	1093.6
10°	1102.8	1095.7	1075.3	1072.3	1066.2
12.5°	1087.5	1078.4	1050.9	1044.8	1033.6
15°	1069.2	1058.0	1023.5	1004.1	993.9
17.5°	1047.9	1031.6	988.9	966.5	950.2
20°	1023.5	1003.1	952.2	926.8	904.4
22.5°	997.0	973.6	914.6	880.0	864.7
25°	970.6	938.0	870.9	829.1	813.9
27.5°	939.0	904.4	830.2	782.3	758.9
30°	905.4	866.8	785.4	733.5	706.0
32.5°	872.9	826.1	742.7	681.6	656.2
35°	836.3	784.4	694.8	630.8	608.4
37.5°	800.7	744.7	650.1	579.9	554.5
40°	763.0	702.0	603.3	531.1	504.6
42.5°	724.4	659.2	556.5	481.2	455.8
45°	683.7	615.5	508.7	436.4	412.0
47.5°	645.0	572.8	462.9	390.7	368.3
50°	602.3	530.0	418.1	347.9	326.6
52.5°	560.6	484.3	375.4	308.3	288.9
55°	519.9	440.5	330.6	269.6	250.3
57.5°	478.2	396.8	291.0	234.0	217.7
60°	435.4	354.0	249.3	197.4	181.1
62.5°	393.7	312.3	213.6	164.8	156.7
65°	351.0	268.6	177.0	142.4	139.4
67.5°	310.3	227.9	142.4	125.1	122.1
70°	267.6	188.2	118.0	107.8	103.8
72.5°	226.9	151.6	98.7	90.5	88.5
75°	187.2	116.0	81.4	74.3	73.2
77.5°	147.5	82.4	64.1	60.0	58.0
80°	110.9	59.0	48.8	44.8	44.8
82.5°	77.3	39.7	33.6	31.5	31.5
85°	43.7	22.4	19.3	19.3	19.3
87.5°	16.3	8.1	8.1	7.1	7.1
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	21.24	22.76	21.60	23.07	23.39	17.20	18.72	17.56	19.03	19.35
	3H	23.00	24.37	23.38	24.70	25.06	18.46	19.83	18.84	20.16	20.52
	4H	23.67	24.95	24.07	25.30	25.68	18.96	20.24	19.36	20.59	20.97
	6H	24.16	25.34	24.57	25.71	26.10	19.35	20.53	19.76	20.89	21.29
	8H	24.32	25.45	24.75	25.84	26.24	19.47	20.60	19.90	20.99	21.39
	12H	24.43	25.50	24.86	25.89	26.32	19.55	20.63	19.98	21.01	21.44
4H	2H	21.34	22.62	21.74	22.97	23.35	17.89	19.17	18.29	19.52	19.90
	3H	23.27	24.34	23.69	24.74	25.14	19.34	20.40	19.75	20.80	21.20
	4H	24.02	24.98	24.46	25.40	25.84	19.94	20.89	20.37	21.31	21.75
	6H	24.62	25.45	25.07	25.89	26.35	20.42	21.26	20.88	21.70	22.16
	8H	24.83	25.61	25.29	26.05	26.52	20.59	21.36	21.05	21.81	22.27
	12H	24.98	25.68	25.47	26.16	26.63	20.70	21.40	21.18	21.88	22.35
8H	4H	24.05	24.83	24.51	25.27	25.74	20.29	21.07	20.75	21.51	21.98
	6H	24.69	25.33	25.18	25.82	26.30	20.88	21.52	21.37	22.01	22.49
	8H	24.94	25.51	25.45	26.02	26.51	21.10	21.67	21.61	22.18	22.67
	12H	25.14	25.65	25.65	26.14	26.71	21.28	21.79	21.79	22.28	22.84
12H	4H	24.03	24.73	24.52	25.21	25.68	20.33	21.03	20.81	21.51	21.98
	6H	24.67	25.24	25.18	25.75	26.24	20.94	21.52	21.45	22.03	22.51
	8H	24.95	25.46	25.46	25.95	26.52	21.21	21.72	21.72	22.21	22.78