

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: P997763

Luminaire Tested: SA2XXRDP-B675DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997763
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-B675DB50-4F0-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

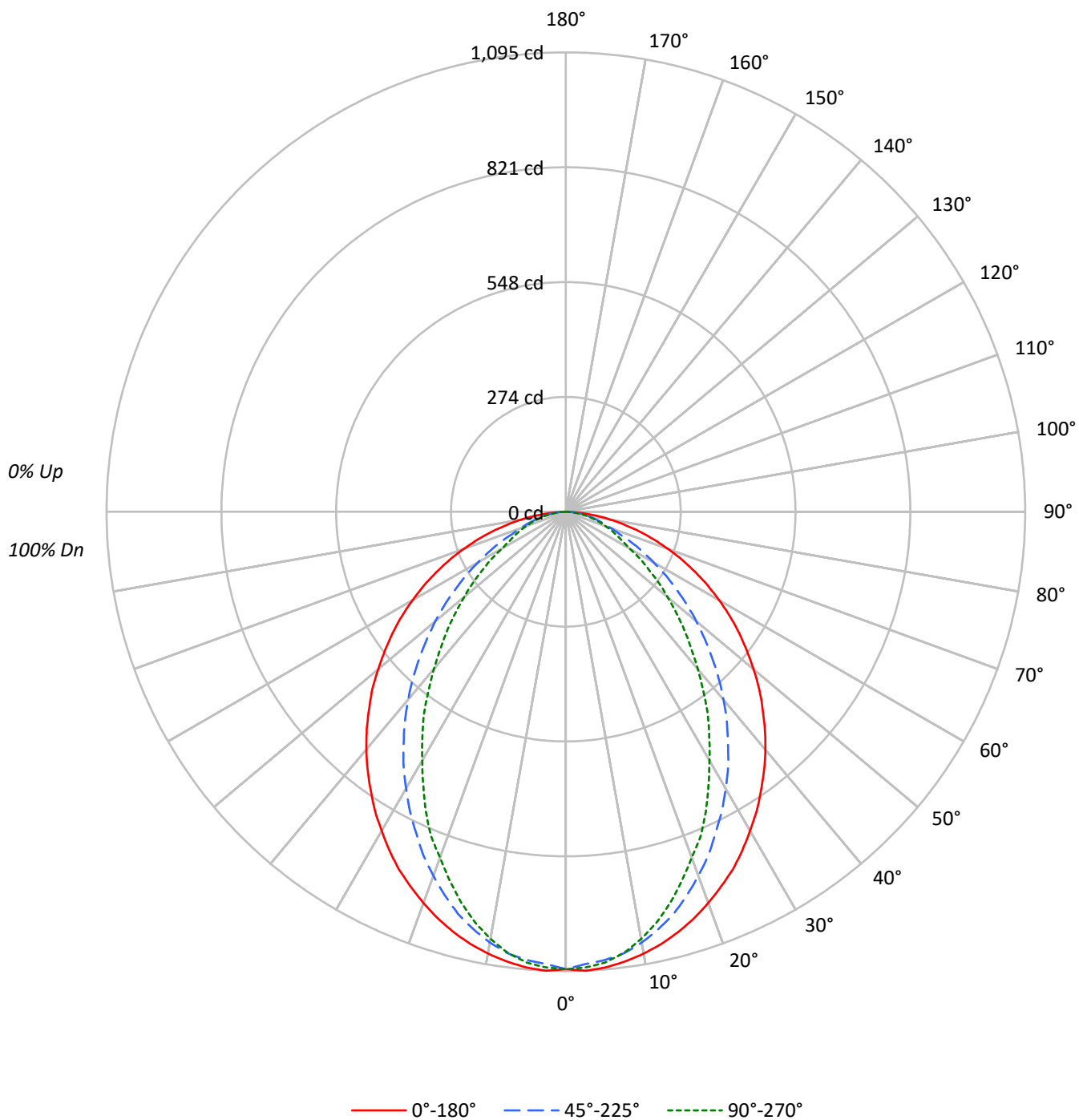
Lumens per Lamp: N/A
Luminaire Lumens: 2242.0 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	17256	17256	17256
5°	17321	17040	17134
10°	17189	16761	16618
15°	16992	16265	15796
20°	16719	15555	14773
25°	16439	14750	13784
30°	16048	13921	12515
35°	15670	13021	11401
40°	15289	12088	10111
45°	14842	11043	8945
50°	14382	9986	7799
55°	13912	8848	6698
60°	13366	7652	5559
65°	12750	6431	5064
70°	12010	5295	4656
75°	11100	4825	4342
80°	9799	4321	3956
85°	7701	3396	3396

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.2	4.6
10°-20°	280.5	12.5
20°-30°	393.8	17.6
30°-40°	429.2	19.1
40°-50°	394.5	17.6
50°-60°	309.8	13.8
60°-70°	201.7	9.0
70°-80°	103.8	4.6
80°-90°	26.5	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°	776.4	34.6
0°-40°	1205.7	53.8
0°-60°	1910.0	85.2
0°-90°	2242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2242.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1090	1090	1090	1090	1090	
5°	1090	1085	1072	1081	1078	103
15°	1037	1026	992	974	964	292
25°	941	910	844	804	789	433
35°	811	761	674	612	590	508
45°	663	597	493	423	400	512
55°	504	427	321	261	243	450
65°	340	260	172	138	135	337
75°	182	112	79	72	71	192
85°	42	22	19	19	19	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1090.1	1090.1	1090.1	1090.1	1090.1
2.5°	1095.1	1090.1	1079.3	1089.1	1087.2
5°	1090.1	1085.2	1072.4	1081.3	1078.3
7.5°	1081.3	1075.3	1061.5	1065.5	1060.5
10°	1069.4	1062.5	1042.8	1039.8	1033.9
12.5°	1054.6	1045.7	1019.1	1013.2	1002.3
15°	1036.9	1026.0	992.5	973.7	963.9
17.5°	1016.1	1000.4	958.9	937.2	921.4
20°	992.5	972.7	923.4	898.7	877.0
22.5°	966.8	944.1	886.9	853.4	838.6
25°	941.2	909.6	844.5	804.0	789.2
27.5°	910.6	877.0	805.0	758.7	736.0
30°	878.0	840.5	761.6	711.3	684.7
32.5°	846.5	801.1	720.2	661.0	636.3
35°	810.9	760.6	673.8	611.7	590.0
37.5°	776.4	722.2	630.4	562.3	537.7
40°	739.9	680.7	585.0	515.0	489.3
42.5°	702.4	639.3	539.6	466.6	442.0
45°	663.0	596.9	493.3	423.2	399.6
47.5°	625.5	555.4	448.9	378.8	357.1
50°	584.0	514.0	405.5	337.4	316.7
52.5°	543.6	469.6	364.0	298.9	280.2
55°	504.1	427.2	320.6	261.4	242.7
57.5°	463.7	384.8	282.2	226.9	211.1
60°	422.2	343.3	241.7	191.4	175.6
62.5°	381.8	302.9	207.2	159.8	151.9
65°	340.4	260.4	171.7	138.1	135.2
67.5°	300.9	221.0	138.1	121.3	118.4
70°	259.5	182.5	114.4	104.6	100.6
72.5°	220.0	147.0	95.7	87.8	85.8
75°	181.5	112.5	78.9	72.0	71.0
77.5°	143.0	79.9	62.2	58.2	56.2
80°	107.5	57.2	47.4	43.4	43.4
82.5°	75.0	38.5	32.6	30.6	30.6
85°	42.4	21.7	18.7	18.7	18.7
87.5°	15.8	7.9	7.9	6.9	6.9
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	21.13	22.65	21.50	22.97	23.28	17.09	18.61	17.45	18.93	19.24
	3H	22.90	24.26	23.27	24.59	24.95	18.36	19.72	18.73	20.05	20.41
	4H	23.56	24.84	23.96	25.19	25.57	18.86	20.14	19.26	20.49	20.86
	6H	24.05	25.23	24.46	25.60	25.99	19.24	20.42	19.65	20.79	21.18
	8H	24.22	25.34	24.64	25.73	26.13	19.36	20.49	19.79	20.88	21.28
	12H	24.32	25.40	24.75	25.78	26.21	19.44	20.52	19.87	20.90	21.33
4H	2H	21.23	22.52	21.63	22.86	23.24	17.79	19.07	18.19	19.42	19.79
	3H	23.17	24.23	23.58	24.63	25.03	19.23	20.29	19.64	20.69	21.09
	4H	23.92	24.87	24.35	25.29	25.73	19.83	20.78	20.26	21.20	21.64
	6H	24.51	25.34	24.97	25.78	26.24	20.32	21.15	20.77	21.59	22.05
	8H	24.72	25.50	25.19	25.94	26.41	20.48	21.26	20.94	21.70	22.17
	12H	24.88	25.57	25.36	26.05	26.52	20.60	21.29	21.08	21.77	22.24
8H	4H	23.94	24.72	24.41	25.16	25.63	20.18	20.96	20.65	21.40	21.87
	6H	24.58	25.22	25.08	25.71	26.19	20.77	21.41	21.27	21.90	22.38
	8H	24.83	25.41	25.34	25.92	26.40	20.99	21.57	21.50	22.08	22.56
	12H	25.03	25.54	25.54	26.04	26.60	21.17	21.68	21.68	22.17	22.74
12H	4H	23.93	24.62	24.41	25.10	25.57	20.23	20.92	20.71	21.40	21.87
	6H	24.56	25.14	25.07	25.65	26.14	20.83	21.41	21.35	21.92	22.41
	8H	24.84	25.35	25.35	25.85	26.41	21.11	21.62	21.62	22.11	22.67