

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: P997731

Luminaire Tested: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997731
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-B485DB2750-4F0-XX-W2A-F_2700K
Description: Define 2 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

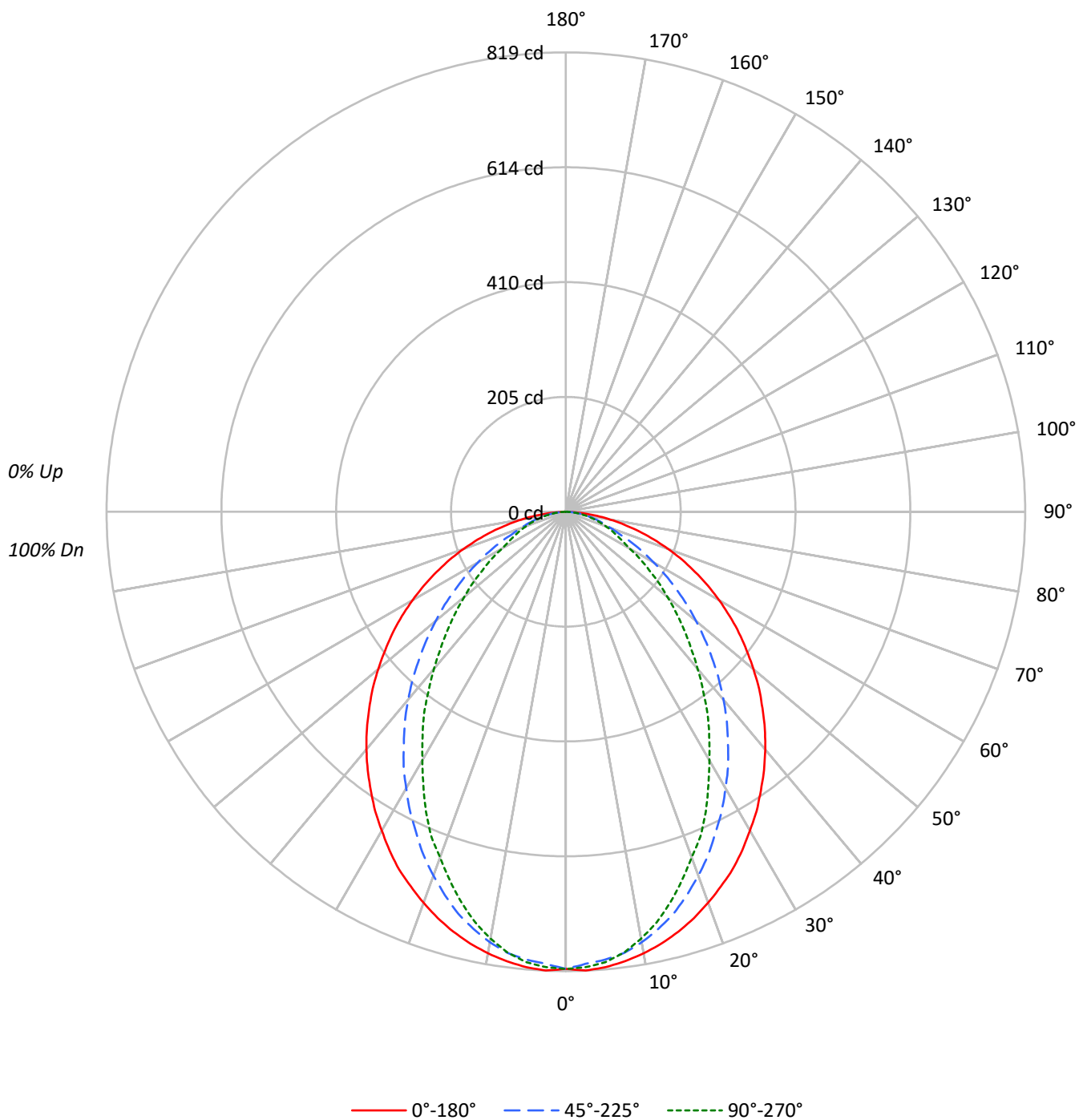
Lumens per Lamp: N/A
Luminaire Lumens: 1676.0 lumens
Efficiency: N/A
Efficacy: 69.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V): 120
Input Current (A_{in}): 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°	12899	12899	12899
5°	12949	12739	12809
10°	12849	12529	12423
15°	12702	12158	11807
20°	12497	11628	11044
25°	12289	11026	10305
30°	11998	10406	9355
35°	11714	9733	8522
40°	11429	9036	7559
45°	11094	8254	6687
50°	10752	7464	5829
55°	10402	6615	5006
60°	9991	5721	4157
65°	9529	4806	3783
70°	8979	3957	3480
75°	8299	3608	3248
80°	7329	3227	2953
85°	5757	2543	2543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11094 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	4.6
10°-20°	209.7	12.5
20°-30°	294.4	17.6
30°-40°	320.9	19.1
40°-50°	294.9	17.6
50°-60°	231.6	13.8
60°-70°	150.7	9.0
70°-80°	77.6	4.6
80°-90°	19.8	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°	580.4	34.6
0°-40°	901.3	53.8
0°-60°	1427.8	85.2
0°-90°	1676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1676.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	815	811	802	808	806	77
15°	775	767	742	728	720	218
25°	704	680	631	601	590	324
35°	606	569	504	457	441	379
45°	496	446	369	316	299	383
55°	377	319	240	195	181	337
65°	254	195	128	103	101	252
75°	136	84	59	54	53	144
85°	32	16	14	14	14	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.9	814.9	814.9	814.9	814.9
2.5°	818.6	814.9	806.8	814.2	812.7
5°	814.9	811.2	801.7	808.3	806.1
7.5°	808.3	803.9	793.5	796.5	792.8
10°	799.4	794.3	779.5	777.3	772.9
12.5°	788.4	781.7	761.8	757.4	749.3
15°	775.1	767.0	741.9	727.9	720.5
17.5°	759.6	747.8	716.8	700.6	688.8
20°	741.9	727.2	690.3	671.9	655.6
22.5°	722.7	705.8	663.0	637.9	626.9
25°	703.6	680.0	631.3	601.1	590.0
27.5°	680.7	655.6	601.8	567.1	550.2
30°	656.4	628.3	569.3	531.7	511.8
32.5°	632.8	598.8	538.4	494.1	475.7
35°	606.2	568.6	503.7	457.2	441.0
37.5°	580.4	539.8	471.3	420.4	401.9
40°	553.1	508.9	437.3	385.0	365.8
42.5°	525.1	477.9	403.4	348.8	330.4
45°	495.6	446.2	368.7	316.4	298.7
47.5°	467.6	415.2	335.6	283.2	267.0
50°	436.6	384.2	303.1	252.2	236.7
52.5°	406.4	351.0	272.1	223.5	209.4
55°	376.9	319.3	239.7	195.4	181.4
57.5°	346.6	287.6	210.9	169.6	157.8
60°	315.6	256.6	180.7	143.1	131.3
62.5°	285.4	226.4	154.9	119.5	113.6
65°	254.4	194.7	128.3	103.2	101.0
67.5°	224.9	165.2	103.2	90.7	88.5
70°	194.0	136.4	85.5	78.2	75.2
72.5°	164.5	109.9	71.5	65.6	64.2
75°	135.7	84.1	59.0	53.8	53.1
77.5°	106.9	59.7	46.5	43.5	42.0
80°	80.4	42.8	35.4	32.4	32.4
82.5°	56.0	28.8	24.3	22.9	22.9
85°	31.7	16.2	14.0	14.0	14.0
87.5°	11.8	5.9	5.9	5.2	5.2
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	20.12	21.64	20.48	21.95	22.27	16.08	17.60	16.44	17.91	18.23
	3H	21.88	23.25	22.26	23.58	23.94	17.34	18.71	17.72	19.04	19.40
	4H	22.55	23.83	22.95	24.18	24.56	17.85	19.13	18.25	19.48	19.85
	6H	23.04	24.22	23.45	24.59	24.98	18.23	19.41	18.64	19.78	20.17
	8H	23.20	24.33	23.63	24.72	25.12	18.35	19.48	18.78	19.87	20.27
	12H	23.31	24.39	23.74	24.77	25.20	18.43	19.51	18.86	19.89	20.32
4H	2H	20.22	21.50	20.62	21.85	22.23	16.77	18.05	17.17	18.40	18.78
	3H	22.16	23.22	22.57	23.62	24.02	18.22	19.28	18.63	19.68	20.08
	4H	22.91	23.86	23.34	24.28	24.72	18.82	19.77	19.25	20.19	20.63
	6H	23.50	24.33	23.96	24.77	25.23	19.30	20.14	19.76	20.58	21.04
	8H	23.71	24.49	24.18	24.93	25.40	19.47	20.24	19.93	20.69	21.16
	12H	23.87	24.56	24.35	25.04	25.51	19.58	20.28	20.07	20.76	21.23
8H	4H	22.93	23.71	23.39	24.15	24.62	19.17	19.95	19.63	20.39	20.86
	6H	23.57	24.21	24.06	24.70	25.18	19.76	20.40	20.25	20.89	21.37
	8H	23.82	24.39	24.33	24.90	25.39	19.98	20.55	20.49	21.06	21.55
	12H	24.02	24.53	24.53	25.02	25.59	20.16	20.67	20.67	21.16	21.72
12H	4H	22.91	23.61	23.40	24.09	24.56	19.21	19.91	19.70	20.39	20.86
	6H	23.55	24.13	24.06	24.64	25.12	19.82	20.40	20.33	20.91	21.40
	8H	23.83	24.34	24.34	24.83	25.40	20.09	20.60	20.60	21.10	21.66