

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: P997779

Luminaire Tested: SA2XXRDP-B865DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997779
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-B865DB35-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

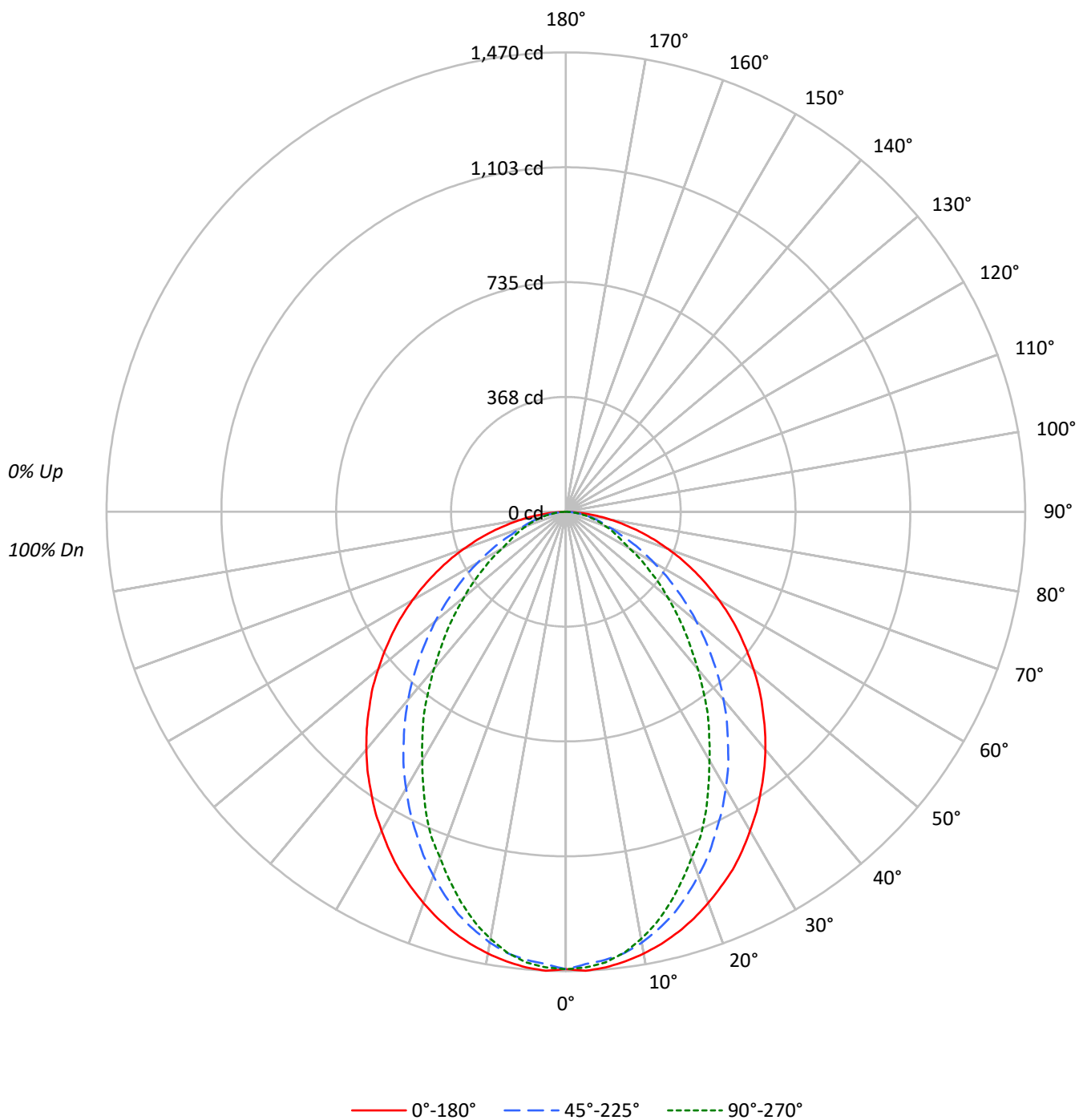
Lumens per Lamp: N/A
Luminaire Lumens: 3010.0 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64		
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43		
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39		
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35		
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32		
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23168	23168	23168
5°	23256	22876	23004
10°	23077	22503	22312
15°	22812	21835	21206
20°	22445	20883	19835
25°	22070	19803	18507
30°	21546	18689	16801
35°	21038	17480	15305
40°	20527	16229	13574
45°	19926	14824	12008
50°	19309	13406	10471
55°	18678	11881	8991
60°	17947	10273	7465
65°	17113	8633	6798
70°	16120	7109	6253
75°	14905	6483	5835
80°	13163	5798	5314
85°	10352	4577	4577

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19926 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	4.6
10°-20°	376.6	12.5
20°-30°	528.7	17.6
30°-40°	576.3	19.1
40°-50°	529.7	17.6
50°-60°	416.0	13.8
60°-70°	270.7	9.0
70°-80°	139.4	4.6
80°-90°	35.6	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°	1042.4	34.6
0°-40°	1618.7	53.8
0°-60°	2564.3	85.2
0°-90°	3010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1464	1464	1464	1464	1464	
5°	1464	1457	1440	1452	1448	139
15°	1392	1378	1332	1307	1294	392
25°	1264	1221	1134	1080	1060	581
35°	1089	1021	905	821	792	681
45°	890	801	662	568	536	687
55°	677	574	430	351	326	605
65°	457	350	230	185	182	453
75°	244	151	106	97	95	258
85°	57	29	25	25	25	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1463.6	1463.6	1463.6	1463.6	1463.6
2.5°	1470.2	1463.6	1449.0	1462.2	1459.6
5°	1463.6	1456.9	1439.7	1451.6	1447.7
7.5°	1451.6	1443.7	1425.2	1430.4	1423.8
10°	1435.7	1426.5	1400.0	1396.0	1388.1
12.5°	1415.9	1404.0	1368.2	1360.3	1345.7
15°	1392.0	1377.5	1332.4	1307.3	1294.0
17.5°	1364.2	1343.0	1287.4	1258.3	1237.1
20°	1332.4	1305.9	1239.7	1206.6	1177.5
22.5°	1298.0	1267.5	1190.7	1145.7	1125.8
25°	1263.6	1221.2	1133.8	1079.5	1059.6
27.5°	1222.5	1177.5	1080.8	1018.5	988.1
30°	1178.8	1128.5	1022.5	955.0	919.2
32.5°	1136.4	1075.5	966.9	887.4	854.3
35°	1088.7	1021.2	904.6	821.2	792.0
37.5°	1042.4	969.5	846.3	755.0	721.8
40°	993.4	913.9	785.4	691.4	656.9
42.5°	943.0	858.3	724.5	626.5	593.4
45°	890.1	801.3	662.2	568.2	536.4
47.5°	839.7	745.7	602.6	508.6	479.5
50°	784.1	690.1	544.4	453.0	425.2
52.5°	729.8	630.5	488.7	401.3	376.2
55°	676.8	573.5	430.5	351.0	325.8
57.5°	622.5	516.6	378.8	304.6	283.4
60°	566.9	460.9	324.5	257.0	235.8
62.5°	512.6	406.6	278.1	214.6	204.0
65°	456.9	349.7	230.5	185.4	181.5
67.5°	404.0	296.7	185.4	162.9	158.9
70°	348.3	245.0	153.6	140.4	135.1
72.5°	295.4	197.3	128.5	117.9	115.2
75°	243.7	151.0	106.0	96.7	95.4
77.5°	192.1	107.3	83.4	78.1	75.5
80°	144.4	76.8	63.6	58.3	58.3
82.5°	100.7	51.7	43.7	41.1	41.1
85°	57.0	29.1	25.2	25.2	25.2
87.5°	21.2	10.6	10.6	9.3	9.3
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	22.15	23.68	22.52	23.99	24.30	18.11	19.63	18.48	19.95	20.26
	3H	23.92	25.28	24.30	25.61	25.97	19.38	20.74	19.76	21.07	21.43
	4H	24.59	25.87	24.99	26.21	26.59	19.88	21.16	20.28	21.51	21.89
	6H	25.07	26.26	25.49	26.62	27.02	20.26	21.44	20.67	21.81	22.20
	8H	25.24	26.37	25.67	26.76	27.16	20.39	21.51	20.81	21.90	22.30
	12H	25.34	26.42	25.77	26.80	27.23	20.47	21.55	20.90	21.93	22.36
4H	2H	22.26	23.54	22.66	23.89	24.27	18.81	20.09	19.21	20.44	20.82
	3H	24.19	25.25	24.60	25.65	26.05	20.25	21.32	20.66	21.72	22.12
	4H	24.94	25.90	25.37	26.31	26.75	20.85	21.81	21.28	22.22	22.66
	6H	25.53	26.36	25.99	26.81	27.27	21.34	22.17	21.80	22.61	23.07
	8H	25.75	26.52	26.21	26.97	27.44	21.50	22.28	21.97	22.72	23.19
	12H	25.90	26.60	26.38	27.07	27.55	21.62	22.31	22.10	22.79	23.26
8H	4H	24.96	25.74	25.43	26.19	26.65	21.21	21.98	21.67	22.43	22.89
	6H	25.60	26.25	26.10	26.74	27.21	21.79	22.44	22.29	22.93	23.40
	8H	25.85	26.43	26.37	26.94	27.43	22.01	22.59	22.53	23.10	23.59
	12H	26.06	26.57	26.57	27.06	27.62	22.19	22.70	22.70	23.20	23.76
12H	4H	24.95	25.64	25.43	26.12	26.59	21.25	21.94	21.73	22.42	22.89
	6H	25.58	26.16	26.10	26.67	27.16	21.86	22.43	22.37	22.94	23.43
	8H	25.87	26.38	26.38	26.87	27.43	22.13	22.64	22.64	23.13	23.70