

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: P997777

Luminaire Tested: SA2XXRDP-B865DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997777
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-B865DB30-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

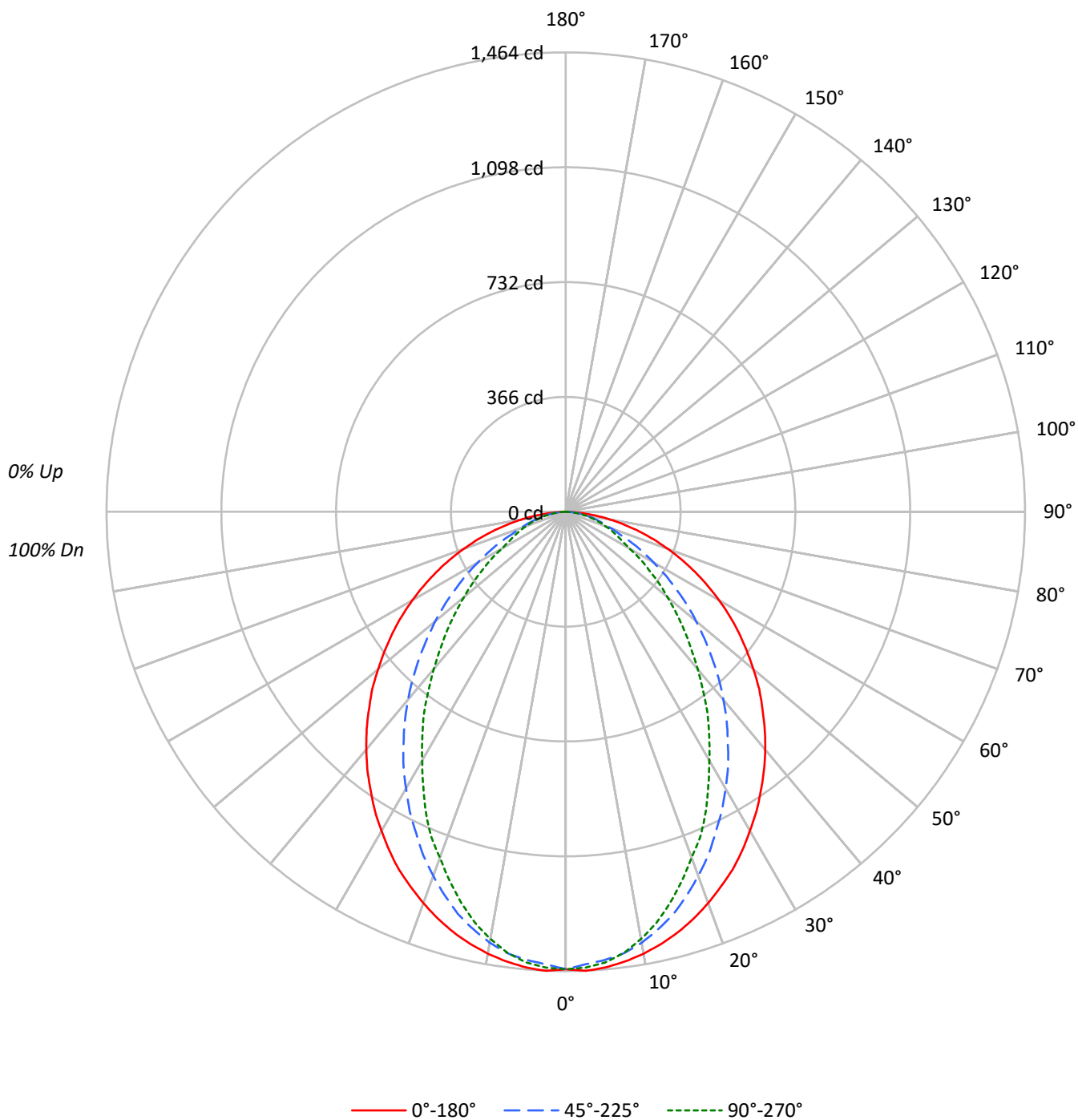
Lumens per Lamp: N/A
Luminaire Lumens: 2998.0 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23074	23074	23074
5°	23162	22786	22911
10°	22985	22413	22222
15°	22722	21748	21122
20°	22355	20800	19756
25°	21981	19722	18433
30°	21460	18614	16734
35°	20955	17411	15245
40°	20445	16165	13520
45°	19845	14766	11961
50°	19233	13352	10429
55°	18603	11831	8955
60°	17874	10232	7433
65°	17046	8596	6768
70°	16060	7081	6230
75°	14843	6452	5810
80°	13108	5770	5287
85°	10298	4559	4559

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19845 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.6	4.6
10°-20°	375.1	12.5
20°-30°	526.6	17.6
30°-40°	574.0	19.1
40°-50°	527.5	17.6
50°-60°	414.3	13.8
60°-70°	269.7	9.0
70°-80°	138.8	4.6
80°-90°	35.5	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°	1038.2	34.6
0°-40°	1612.2	53.8
0°-60°	2554.0	85.2
0°-90°	2998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2998.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1458	1451	1434	1446	1442	138
15°	1386	1372	1327	1302	1289	391
25°	1258	1216	1129	1075	1055	579
35°	1084	1017	901	818	789	679
45°	886	798	660	566	534	685
55°	674	571	429	350	324	602
65°	455	348	230	185	181	451
75°	243	150	106	96	95	257
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°	1457.7	1457.7	1457.7	1457.7	1457.7
2.5°	1464.3	1457.7	1443.2	1456.4	1453.8
5°	1457.7	1451.1	1434.0	1445.9	1441.9
7.5°	1445.9	1437.9	1419.5	1424.7	1418.1
10°	1430.0	1420.8	1394.4	1390.4	1382.5
12.5°	1410.2	1398.4	1362.7	1354.8	1340.3
15°	1386.5	1372.0	1327.1	1302.1	1288.9
17.5°	1358.8	1337.7	1282.3	1253.2	1232.1
20°	1327.1	1300.7	1234.8	1201.8	1172.8
22.5°	1292.8	1262.5	1186.0	1141.1	1121.3
25°	1258.5	1216.3	1129.2	1075.2	1055.4
27.5°	1217.6	1172.8	1076.5	1014.5	984.1
30°	1174.1	1124.0	1018.4	951.1	915.5
32.5°	1131.9	1071.2	963.0	883.9	850.9
35°	1084.4	1017.1	901.0	817.9	788.9
37.5°	1038.2	965.7	843.0	751.9	719.0
40°	989.4	910.3	782.3	688.6	654.3
42.5°	939.3	854.8	721.6	624.0	591.0
45°	886.5	798.1	659.6	565.9	534.3
47.5°	836.4	742.7	600.2	506.6	477.6
50°	781.0	687.3	542.2	451.2	423.5
52.5°	726.9	627.9	486.8	399.7	374.7
55°	674.1	571.2	428.7	349.6	324.5
57.5°	620.0	514.5	377.3	303.4	282.3
60°	564.6	459.1	323.2	255.9	234.8
62.5°	510.5	405.0	277.0	213.7	203.2
65°	455.1	348.3	229.5	184.7	180.7
67.5°	402.4	295.5	184.7	162.3	158.3
70°	347.0	244.1	153.0	139.8	134.6
72.5°	294.2	196.6	128.0	117.4	114.8
75°	242.7	150.4	105.5	96.3	95.0
77.5°	191.3	106.9	83.1	77.8	75.2
80°	143.8	76.5	63.3	58.0	58.0
82.5°	100.3	51.4	43.5	40.9	40.9
85°	56.7	29.0	25.1	25.1	25.1
87.5°	21.1	10.6	10.6	9.2	9.2
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	22.14	23.66	22.50	23.97	24.29	18.10	19.62	18.46	19.93	20.25
	3H	23.91	25.27	24.28	25.60	25.96	19.37	20.73	19.74	21.06	21.42
	4H	24.57	25.85	24.97	26.20	26.58	19.87	21.15	20.27	21.50	21.87
	6H	25.06	26.24	25.47	26.61	27.00	20.25	21.43	20.66	21.80	22.19
	8H	25.23	26.35	25.65	26.74	27.14	20.37	21.50	20.80	21.89	22.29
	12H	25.33	26.41	25.76	26.79	27.22	20.45	21.53	20.88	21.91	22.34
4H	2H	22.24	23.52	22.64	23.87	24.25	18.79	20.08	19.19	20.42	20.80
	3H	24.18	25.24	24.59	25.64	26.04	20.24	21.30	20.65	21.70	22.10
	4H	24.93	25.88	25.36	26.30	26.74	20.84	21.79	21.27	22.21	22.65
	6H	25.52	26.35	25.98	26.79	27.25	21.33	22.16	21.78	22.60	23.06
	8H	25.73	26.51	26.20	26.95	27.42	21.49	22.27	21.95	22.71	23.18
	12H	25.89	26.58	26.37	27.06	27.53	21.61	22.30	22.09	22.78	23.25
8H	4H	24.95	25.73	25.41	26.17	26.64	21.19	21.97	21.66	22.41	22.88
	6H	25.59	26.23	26.09	26.72	27.20	21.78	22.42	22.27	22.91	23.39
	8H	25.84	26.42	26.35	26.93	27.41	22.00	22.58	22.51	23.09	23.57
	12H	26.04	26.55	26.55	27.05	27.61	22.18	22.69	22.69	23.18	23.75
12H	4H	24.94	25.63	25.42	26.11	26.58	21.24	21.93	21.72	22.41	22.88
	6H	25.57	26.15	26.08	26.66	27.14	21.84	22.42	22.36	22.93	23.42
	8H	25.85	26.36	26.36	26.86	27.42	22.11	22.62	22.62	23.12	23.68