

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: P997774

Luminaire Tested: SA2XXRDP-B865DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997774
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-B865DB2750-4F0-XX-W2A-F_4000K
Description: Define 2 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

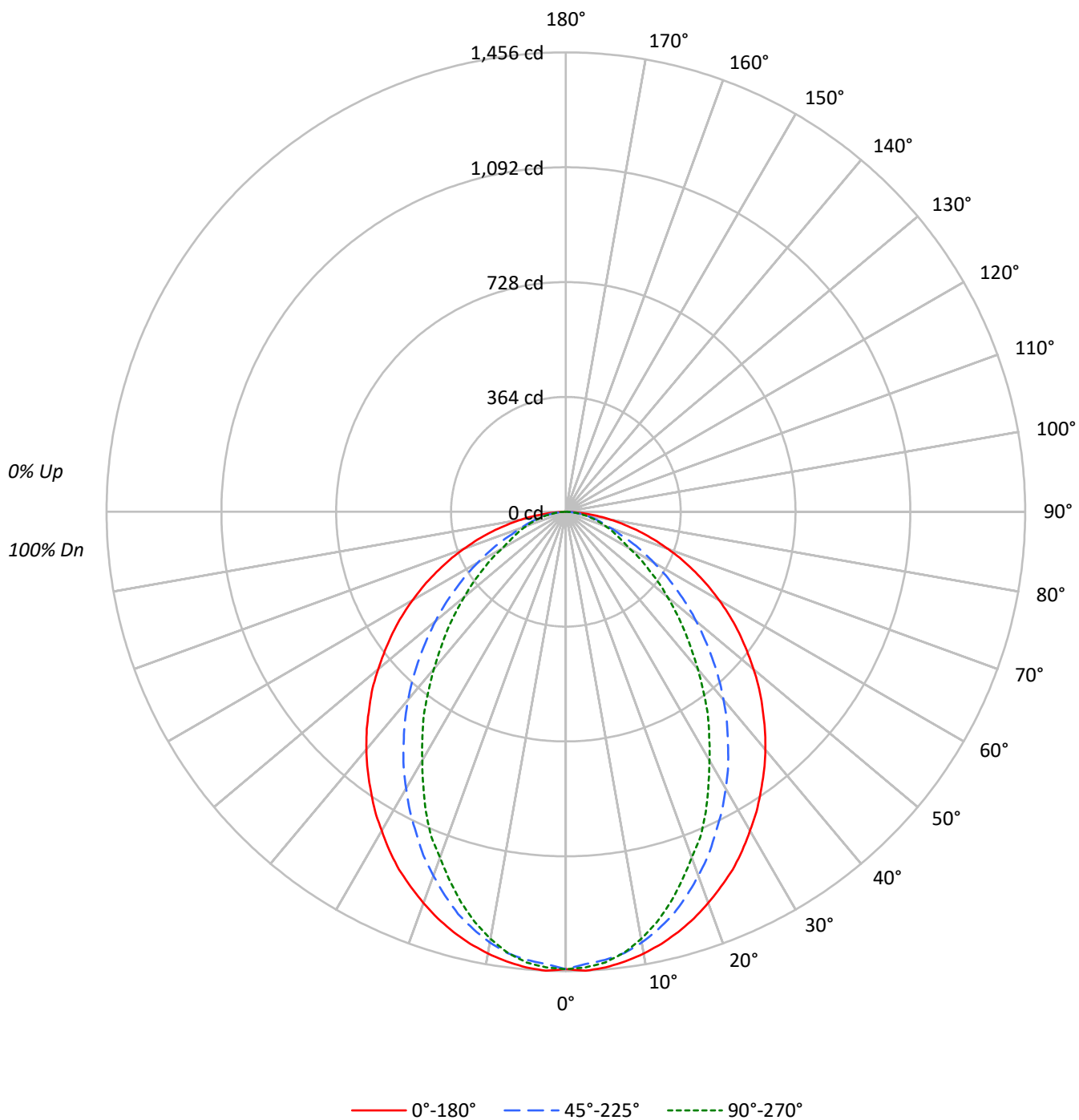
Lumens per Lamp: N/A
Luminaire Lumens: 2981.0 lumens
Efficiency: N/A
Efficacy: 63.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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°	22945	22945	22945
5°	23032	22656	22781
10°	22855	22286	22096
15°	22592	21625	21002
20°	22229	20683	19643
25°	21857	19610	18328
30°	21338	18510	16639
35°	20835	17312	15158
40°	20329	16074	13444
45°	19733	14683	11891
50°	19122	13276	10370
55°	18499	11765	8906
60°	17773	10175	7392
65°	16949	8547	6731
70°	15967	7044	6192
75°	14764	6416	5773
80°	13035	5743	5260
85°	10243	4522	4522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	4.6
10°-20°	372.9	12.5
20°-30°	523.6	17.6
30°-40°	570.7	19.1
40°-50°	524.5	17.6
50°-60°	412.0	13.8
60°-70°	268.1	9.0
70°-80°	138.0	4.6
80°-90°	35.3	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°	1032.3	34.6
0°-40°	1603.1	53.8
0°-60°	2539.6	85.2
0°-90°	2981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1450	1443	1426	1438	1434	137
15°	1379	1364	1320	1295	1282	388
25°	1251	1209	1123	1069	1049	576
35°	1078	1011	896	813	784	675
45°	882	794	656	563	531	681
55°	670	568	426	348	323	599
65°	452	346	228	184	180	449
75°	241	150	105	96	94	255
85°	56	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°	1449.5	1449.5	1449.5	1449.5	1449.5
2.5°	1456.0	1449.5	1435.0	1448.1	1445.5
5°	1449.5	1442.9	1425.8	1437.7	1433.7
7.5°	1437.7	1429.8	1411.4	1416.7	1410.1
10°	1421.9	1412.7	1386.5	1382.6	1374.7
12.5°	1402.2	1390.4	1355.0	1347.1	1332.7
15°	1378.6	1364.2	1319.6	1294.7	1281.6
17.5°	1351.1	1330.1	1275.0	1246.1	1225.2
20°	1319.6	1293.4	1227.8	1195.0	1166.1
22.5°	1285.5	1255.3	1179.2	1134.6	1115.0
25°	1251.4	1209.4	1122.8	1069.1	1049.4
27.5°	1210.7	1166.1	1070.4	1008.7	978.5
30°	1167.4	1117.6	1012.7	945.8	910.3
32.5°	1125.5	1065.1	957.6	878.9	846.1
35°	1078.2	1011.3	895.9	813.3	784.4
37.5°	1032.3	960.2	838.2	747.7	714.9
40°	983.8	905.1	777.9	684.7	650.6
42.5°	934.0	850.0	717.5	620.4	587.7
45°	881.5	793.6	655.9	562.7	531.2
47.5°	831.6	738.5	596.8	503.7	474.8
50°	776.5	683.4	539.1	448.6	421.1
52.5°	722.8	624.4	484.0	397.5	372.5
55°	670.3	568.0	426.3	347.6	322.7
57.5°	616.5	511.6	375.2	301.7	280.7
60°	561.4	456.5	321.4	254.5	233.5
62.5°	507.6	402.7	275.5	212.5	202.0
65°	452.5	346.3	228.2	183.6	179.7
67.5°	400.1	293.8	183.6	161.3	157.4
70°	345.0	242.7	152.2	139.0	133.8
72.5°	292.5	195.4	127.2	116.7	114.1
75°	241.4	149.5	104.9	95.8	94.4
77.5°	190.2	106.2	82.6	77.4	74.8
80°	143.0	76.1	63.0	57.7	57.7
82.5°	99.7	51.2	43.3	40.7	40.7
85°	56.4	28.9	24.9	24.9	24.9
87.5°	21.0	10.5	10.5	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	22.12	23.64	22.48	23.96	24.27	18.08	19.60	18.45	19.92	20.23
	3H	23.89	25.25	24.26	25.58	25.94	19.35	20.71	19.72	21.04	21.40
	4H	24.55	25.83	24.95	26.18	26.56	19.85	21.13	20.25	21.48	21.85
	6H	25.04	26.22	25.45	26.59	26.98	20.23	21.41	20.64	21.78	22.17
	8H	25.21	26.33	25.63	26.72	27.12	20.35	21.48	20.78	21.87	22.27
	12H	25.31	26.39	25.74	26.77	27.20	20.43	21.51	20.86	21.89	22.32
4H	2H	22.22	23.50	22.62	23.85	24.23	18.78	20.06	19.18	20.40	20.78
	3H	24.16	25.22	24.57	25.62	26.02	20.22	21.28	20.63	21.68	22.08
	4H	24.91	25.86	25.34	26.28	26.72	20.82	21.77	21.25	22.19	22.63
	6H	25.50	26.33	25.96	26.77	27.23	21.31	22.14	21.76	22.58	23.04
	8H	25.71	26.49	26.18	26.93	27.40	21.47	22.25	21.93	22.69	23.16
	12H	25.87	26.56	26.35	27.04	27.51	21.59	22.28	22.07	22.76	23.23
8H	4H	24.93	25.71	25.39	26.15	26.62	21.17	21.95	21.64	22.39	22.86
	6H	25.57	26.21	26.07	26.70	27.18	21.76	22.40	22.26	22.89	23.37
	8H	25.82	26.40	26.33	26.91	27.39	21.98	22.56	22.49	23.07	23.55
	12H	26.02	26.53	26.53	27.03	27.59	22.16	22.67	22.67	23.16	23.73
12H	4H	24.92	25.61	25.40	26.09	26.56	21.22	21.91	21.70	22.39	22.86
	6H	25.55	26.13	26.06	26.64	27.12	21.82	22.40	22.34	22.91	23.40
	8H	25.83	26.34	26.34	26.84	27.40	22.10	22.61	22.61	23.10	23.66