

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: P997775

Luminaire Tested: SA2XXRDP-B865DB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997775
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_5000K
Description: Define 2 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

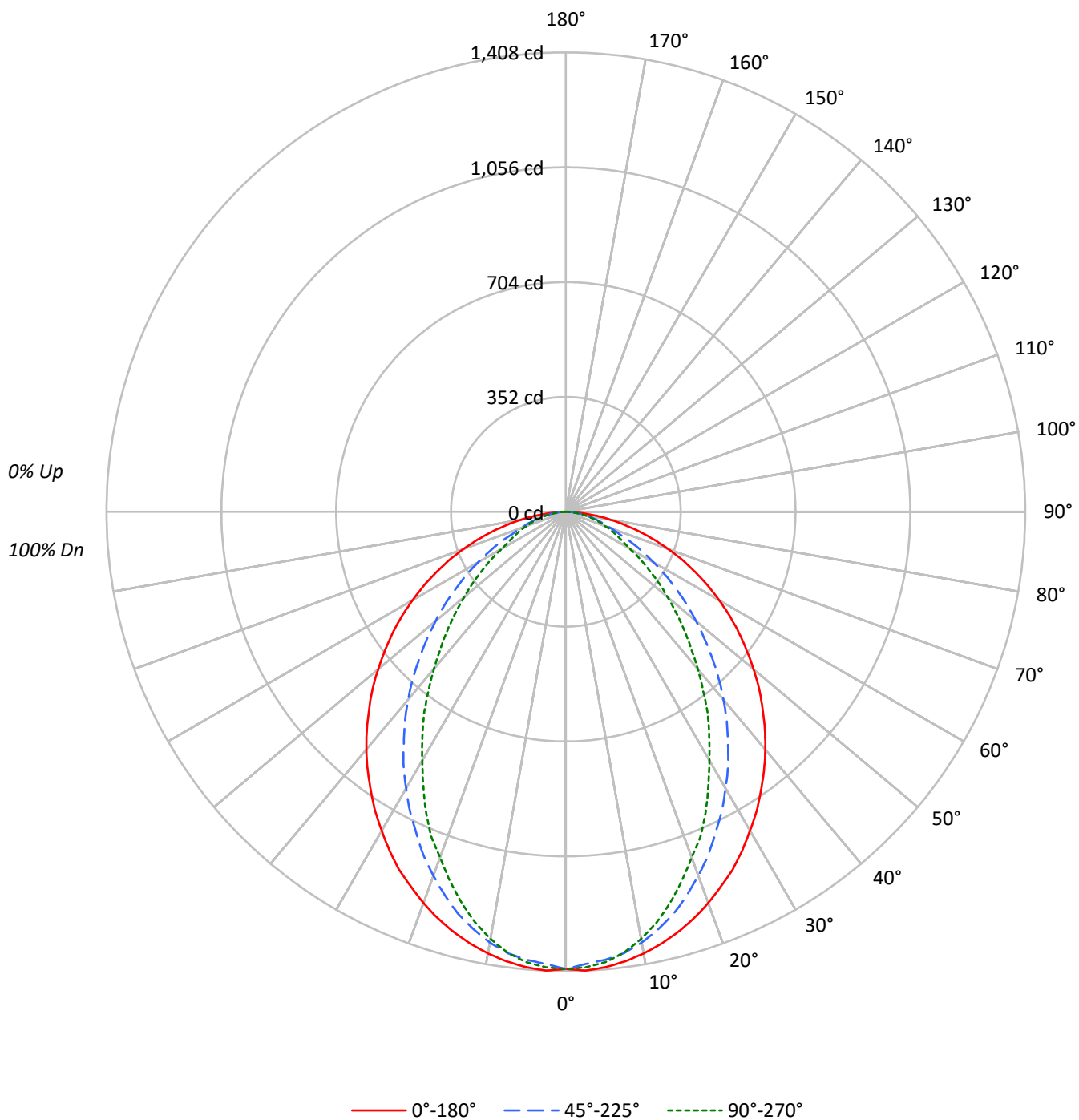
Lumens per Lamp: N/A
Luminaire Lumens: 2882.0 lumens
Efficiency: N/A
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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
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°	22182	22182	22182
5°	22266	21904	22025
10°	22096	21546	21362
15°	21842	20907	20304
20°	21491	19995	18991
25°	21130	18959	17719
30°	20630	17894	16087
35°	20143	16738	14655
40°	19653	15539	12997
45°	19077	14195	11497
50°	18489	12835	10025
55°	17883	11376	8610
60°	17184	9836	7145
65°	16387	8266	6506
70°	15435	6808	5989
75°	14269	6208	5584
80°	12598	5551	5087
85°	9898	4377	4377

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19077 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	4.6
10°-20°	360.5	12.5
20°-30°	506.2	17.6
30°-40°	551.8	19.1
40°-50°	507.1	17.6
50°-60°	398.3	13.8
60°-70°	259.2	9.0
70°-80°	133.5	4.6
80°-90°	34.1	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°	998.1	34.6
0°-40°	1549.8	53.8
0°-60°	2455.2	85.2
0°-90°	2882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2882.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1401	1395	1378	1390	1386	133
15°	1333	1319	1276	1252	1239	376
25°	1210	1169	1086	1034	1014	556
35°	1042	978	866	786	758	652
45°	852	767	634	544	514	658
55°	648	549	412	336	312	579
65°	438	335	221	178	174	434
75°	233	145	102	93	91	247
85°	54	28	24	24	24	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1401.3	1401.3	1401.3	1401.3	1401.3
2.5°	1407.7	1401.3	1387.4	1400.1	1397.5
5°	1401.3	1395.0	1378.5	1389.9	1386.1
7.5°	1389.9	1382.3	1364.5	1369.6	1363.3
10°	1374.7	1365.8	1340.5	1336.6	1329.0
12.5°	1355.7	1344.3	1310.0	1302.4	1288.5
15°	1332.8	1318.9	1275.8	1251.7	1239.0
17.5°	1306.2	1285.9	1232.7	1204.8	1184.5
20°	1275.8	1250.4	1187.0	1155.3	1127.4
22.5°	1242.8	1213.6	1140.1	1097.0	1077.9
25°	1209.8	1169.2	1085.5	1033.6	1014.5
27.5°	1170.5	1127.4	1034.8	975.2	946.1
30°	1128.7	1080.5	979.0	914.3	880.1
32.5°	1088.1	1029.8	925.8	849.7	818.0
35°	1042.4	977.8	866.2	786.3	758.4
37.5°	998.0	928.3	810.4	722.9	691.2
40°	951.1	875.0	752.0	662.0	629.0
42.5°	902.9	821.8	693.7	599.8	568.1
45°	852.2	767.2	634.1	544.0	513.6
47.5°	804.0	714.0	577.0	487.0	459.1
50°	750.8	660.7	521.2	433.7	407.1
52.5°	698.8	603.6	468.0	384.3	360.2
55°	648.0	549.1	412.2	336.1	312.0
57.5°	596.0	494.6	362.7	291.7	271.4
60°	542.8	441.3	310.7	246.0	225.7
62.5°	490.8	389.3	266.3	205.4	195.3
65°	437.5	334.8	220.7	177.5	173.7
67.5°	386.8	284.1	177.5	156.0	152.2
70°	333.5	234.6	147.1	134.4	129.4
72.5°	282.8	189.0	123.0	112.9	110.3
75°	233.3	144.6	101.5	92.6	91.3
77.5°	183.9	102.7	79.9	74.8	72.3
80°	138.2	73.6	60.9	55.8	55.8
82.5°	96.4	49.5	41.8	39.3	39.3
85°	54.5	27.9	24.1	24.1	24.1
87.5°	20.3	10.1	10.1	8.9	8.9
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	22.00	23.52	22.37	23.84	24.15	17.96	19.48	18.33	19.80	20.11
	3H	23.77	25.13	24.15	25.46	25.82	19.23	20.59	19.61	20.92	21.28
	4H	24.43	25.71	24.83	26.06	26.44	19.73	21.01	20.13	21.36	21.74
	6H	24.92	26.11	25.34	26.47	26.86	20.11	21.29	20.52	21.66	22.05
	8H	25.09	26.22	25.52	26.60	27.01	20.24	21.36	20.66	21.75	22.15
	12H	25.19	26.27	25.62	26.65	27.08	20.32	21.40	20.75	21.78	22.21
4H	2H	22.11	23.39	22.51	23.74	24.11	18.66	19.94	19.06	20.29	20.67
	3H	24.04	25.10	24.45	25.50	25.90	20.10	21.17	20.51	21.57	21.97
	4H	24.79	25.75	25.22	26.16	26.60	20.70	21.66	21.13	22.07	22.51
	6H	25.38	26.21	25.84	26.66	27.12	21.19	22.02	21.65	22.46	22.92
	8H	25.60	26.37	26.06	26.82	27.28	21.35	22.13	21.82	22.57	23.04
	12H	25.75	26.44	26.23	26.92	27.39	21.47	22.16	21.95	22.64	23.11
8H	4H	24.81	25.59	25.28	26.04	26.50	21.06	21.83	21.52	22.28	22.74
	6H	25.45	26.09	25.95	26.59	27.06	21.64	22.28	22.14	22.78	23.25
	8H	25.70	26.28	26.22	26.79	27.28	21.86	22.44	22.38	22.95	23.44
	12H	25.91	26.42	26.42	26.91	27.47	22.04	22.55	22.55	23.04	23.61
12H	4H	24.80	25.49	25.28	25.97	26.44	21.10	21.79	21.58	22.27	22.74
	6H	25.43	26.01	25.95	26.52	27.01	21.71	22.28	22.22	22.79	23.28
	8H	25.72	26.23	26.23	26.72	27.28	21.98	22.49	22.49	22.98	23.55