

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: P998660

Luminaire Tested: SA2XXDIP-B485D925UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998660
REPORT IS A COMBINATION OF REPORTS P984403 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D925UB40-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

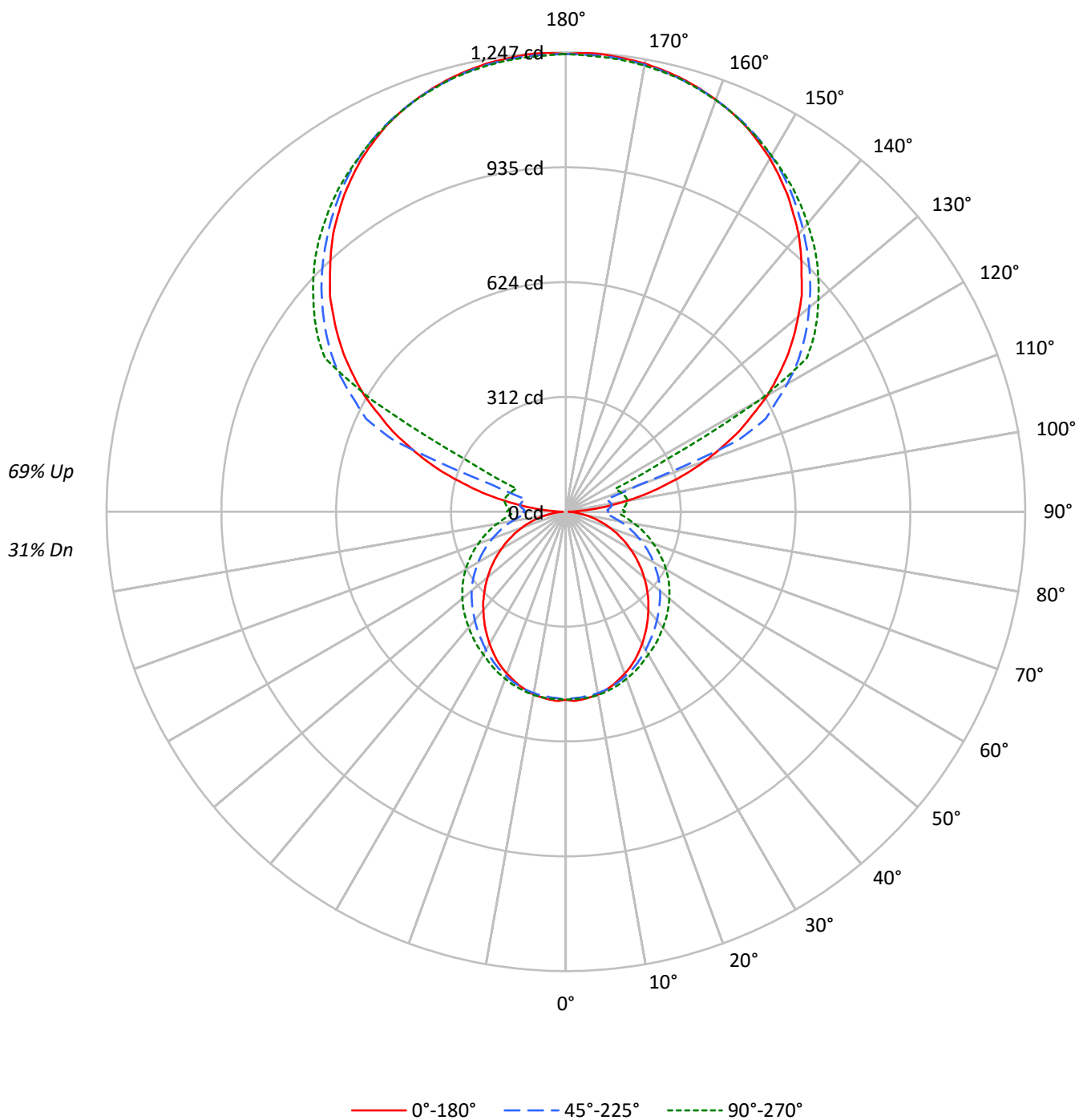
Lumens per Lamp: N/A
Luminaire Lumens: 5592.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
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
RCR																	
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	88	84	80	83	79	76	72	62	60	58	47	45	44	33	32	31
2	84	76	70	65	75	69	63	59	54	50	47	41	38	36	28	27	25
3	76	67	59	53	68	60	54	48	47	43	39	36	32	30	25	23	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	22	20	18
5	64	52	44	38	57	47	40	35	37	32	28	28	24	22	20	17	15
6	58	46	38	33	52	42	35	30	33	28	24	25	22	19	18	15	13
7	54	42	34	28	48	38	31	26	30	25	21	23	19	16	16	14	12
8	50	38	30	25	45	34	27	23	27	22	19	21	17	14	15	12	10
9	46	34	27	22	41	31	25	20	25	20	16	19	15	13	13	11	9
10	43	31	24	19	39	28	22	18	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8078	8078	8078
5°	8113	7733	7689
10°	8059	7464	7356
15°	7946	7188	7014
20°	7802	6896	6690
25°	7660	6618	6395
30°	7461	6336	6104
35°	7260	6063	5891
40°	7049	5826	5678
45°	6849	5612	5493
50°	6631	5415	5310
55°	6403	5205	5125
60°	6127	4986	4929
65°	5837	4736	4704
70°	5509	4467	4462
75°	5091	4198	4232
80°	4431	3916	3996
85°	3757	3653	3791

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6849 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	0.9
10°-20°	138.7	2.5
20°-30°	210.2	3.8
30°-40°	256.0	4.6
40°-50°	275.4	4.9
50°-60°	267.5	4.8
60°-70°	233.6	4.2
70°-80°	179.8	3.2
80°-90°	122.6	2.2
90°-100°	124.1	2.2
100°-110°	213.4	3.8
110°-120°	445.2	8.0
120°-130°	694.2	12.4
130°-140°	723.0	12.9
140°-150°	664.9	11.9
150°-160°	533.3	9.5
160°-170°	343.6	6.1
170°-180°	118.3	2.1
0°-30°	397.3	7.1
0°-40°	653.3	11.7
0°-60°	1196.2	21.4
0°-90°	1732.1	31.0
90°-120°	782.6	14.0
90°-150°	2864.7	51.2
90°-180°	3860.0	69.0
0°-180°	5592.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	512	510	505	510	509	49
15°	488	490	490	496	496	137
25°	444	449	456	464	467	204
35°	382	395	409	425	430	239
45°	314	334	359	382	390	242
55°	240	267	305	332	342	215
65°	164	200	244	274	284	163
75°	91	132	180	212	221	96
85°	27	72	120	151	161	28
90°	8	61	116	150	160	9
95°	64	70	120	153	161	74
105°	277	325	118	154	166	296
115°	520	543	599	205	148	512
125°	732	744	785	811	820	654
135°	905	920	935	960	964	700
145°	1049	1048	1064	1074	1074	656
155°	1155	1147	1158	1164	1156	532
165°	1217	1212	1215	1221	1215	344
175°	1245	1239	1241	1247	1238	119
180°	1243	1243	1243	1243	1243	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	510.3	510.3	510.3	510.3	510.3
2.5°	514.0	511.7	506.6	510.3	508.8
5°	511.7	509.5	505.1	509.5	508.8
7.5°	508.0	506.6	502.9	508.0	507.3
10°	503.6	502.1	499.9	505.8	505.1
12.5°	496.2	497.0	495.5	501.4	500.7
15°	488.1	489.6	489.6	496.2	495.5
17.5°	477.7	480.7	482.9	489.6	489.6
20°	467.4	471.1	474.0	482.2	482.2
22.5°	456.3	460.7	465.2	473.3	474.8
25°	443.7	448.9	455.5	464.4	466.6
27.5°	428.9	437.1	444.4	455.5	457.0
30°	414.1	423.7	433.4	445.2	447.4
32.5°	397.9	409.0	420.8	434.8	439.3
35°	382.3	394.9	409.0	425.2	430.4
37.5°	365.3	379.4	397.1	414.9	420.0
40°	348.3	364.6	384.5	403.8	410.4
42.5°	332.0	348.3	372.0	393.4	400.1
45°	313.6	333.5	359.4	382.3	389.7
47.5°	295.8	317.3	346.8	370.5	378.6
50°	277.3	300.2	333.5	358.7	366.8
52.5°	259.6	284.0	319.5	345.4	354.2
55°	240.3	267.0	305.4	332.0	341.7
57.5°	221.9	251.4	289.9	318.7	328.3
60°	201.9	233.7	275.8	303.9	314.3
62.5°	184.1	217.4	259.6	289.9	299.5
65°	164.2	200.4	244.0	274.4	284.0
67.5°	146.4	184.1	228.5	258.8	269.2
70°	127.2	165.7	211.5	243.3	252.2
72.5°	109.4	149.4	196.0	227.0	238.1
75°	91.0	132.4	179.7	211.5	221.1
77.5°	73.2	116.1	164.2	196.0	206.3
80°	55.5	100.6	148.6	179.7	190.1
82.5°	40.7	85.0	133.9	164.9	174.5
85°	26.6	72.5	119.8	150.9	161.2
87.5°	16.3	60.6	108.0	138.3	147.9
90°	8.3	61.1	115.6	149.7	160.4
92.5°	29.2	64.8	112.6	143.2	153.0
95°	64.3	69.5	120.1	152.7	160.7
97.5°	110.4	68.5	125.8	155.8	165.6
100°	164.3	68.5	125.2	159.7	169.6
102.5°	222.9	245.5	121.8	158.3	169.1
105°	277.0	325.4	118.4	154.2	165.9
107.5°	340.9	381.0	115.0	150.1	161.8
110°	401.3	434.9	211.3	145.0	156.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	458.9	486.8	505.6	141.7	152.5
115°	520.0	543.4	599.2	205.1	148.4
117.5°	572.2	596.1	642.5	536.1	308.0
120°	631.6	648.1	693.9	725.3	612.1
122.5°	681.9	697.1	742.4	767.8	775.3
125°	732.5	744.2	784.9	811.1	820.5
127.5°	779.2	791.0	824.5	852.0	859.6
130°	823.3	836.9	862.4	890.0	895.0
132.5°	868.3	879.1	900.1	925.2	930.3
135°	905.2	919.6	935.1	959.7	963.8
137.5°	944.8	955.6	968.3	991.3	993.8
140°	983.4	989.9	1001.3	1021.2	1021.1
142.5°	1015.8	1021.4	1033.1	1049.2	1048.4
145°	1049.3	1048.4	1063.7	1074.4	1073.6
147.5°	1078.9	1076.2	1091.5	1096.7	1095.4
150°	1107.7	1101.4	1115.8	1121.2	1116.7
152.5°	1132.0	1124.8	1138.3	1143.7	1137.4
155°	1155.4	1147.3	1158.1	1163.5	1156.3
157.5°	1174.2	1167.1	1175.1	1181.4	1174.2
160°	1190.4	1185.0	1190.4	1195.8	1189.5
162.5°	1204.8	1199.4	1203.9	1210.2	1202.1
165°	1217.4	1212.0	1214.7	1221.0	1214.7
167.5°	1227.3	1221.9	1224.6	1230.9	1222.8
170°	1235.4	1230.0	1231.8	1238.1	1230.0
172.5°	1240.8	1235.4	1237.2	1243.5	1235.4
175°	1245.3	1239.0	1240.8	1247.1	1238.1
177.5°	1247.1	1240.8	1241.7	1248.0	1239.9
180°	1242.6	1242.6	1242.6	1242.6	1242.6

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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	10.41	11.15	11.51	12.25	13.77	13.49	14.23	14.58	15.33	16.84
	3H	11.86	12.53	12.97	13.64	15.17	16.07	16.74	17.17	17.84	19.38
	4H	12.34	12.97	13.45	14.08	15.62	17.32	17.95	18.43	19.06	20.60
	6H	12.61	13.20	13.74	14.31	15.86	18.61	19.19	19.73	20.31	21.86
	8H	12.67	13.23	13.80	14.36	15.90	19.26	19.82	20.39	20.95	22.49
	12H	12.68	13.21	13.81	14.34	15.90	19.98	20.52	21.12	21.64	23.21
4H	2H	11.45	12.08	12.57	13.19	14.73	13.80	14.44	14.93	15.55	17.09
	3H	13.15	13.68	14.28	14.82	16.37	16.59	17.12	17.71	18.26	19.81
	4H	13.77	14.26	14.90	15.39	16.96	18.00	18.49	19.13	19.62	21.19
	6H	14.18	14.60	15.31	15.75	17.31	19.46	19.89	20.60	21.03	22.60
	8H	14.28	14.68	15.42	15.82	17.40	20.21	20.61	21.35	21.75	23.33
	12H	14.32	14.68	15.47	15.83	17.42	21.04	21.40	22.19	22.55	24.14
8H	4H	14.55	14.95	15.68	16.09	17.66	18.13	18.53	19.27	19.67	21.25
	6H	15.17	15.51	16.33	16.69	18.26	19.76	20.09	20.92	21.27	22.85
	8H	15.39	15.69	16.56	16.85	18.44	20.65	20.94	21.81	22.10	23.69
	12H	15.52	15.78	16.69	16.94	18.57	21.63	21.89	22.80	23.05	24.68
12H	4H	14.74	15.10	15.89	16.25	17.84	18.10	18.47	19.26	19.62	21.20
	6H	15.51	15.80	16.67	16.96	18.56	19.78	20.08	20.94	21.23	22.83
	8H	15.81	16.07	16.97	17.22	18.85	20.70	20.96	21.87	22.12	23.75