

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: P998011

Luminaire Tested: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998011
REPORT IS A COMBINATION OF REPORTS P983748 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

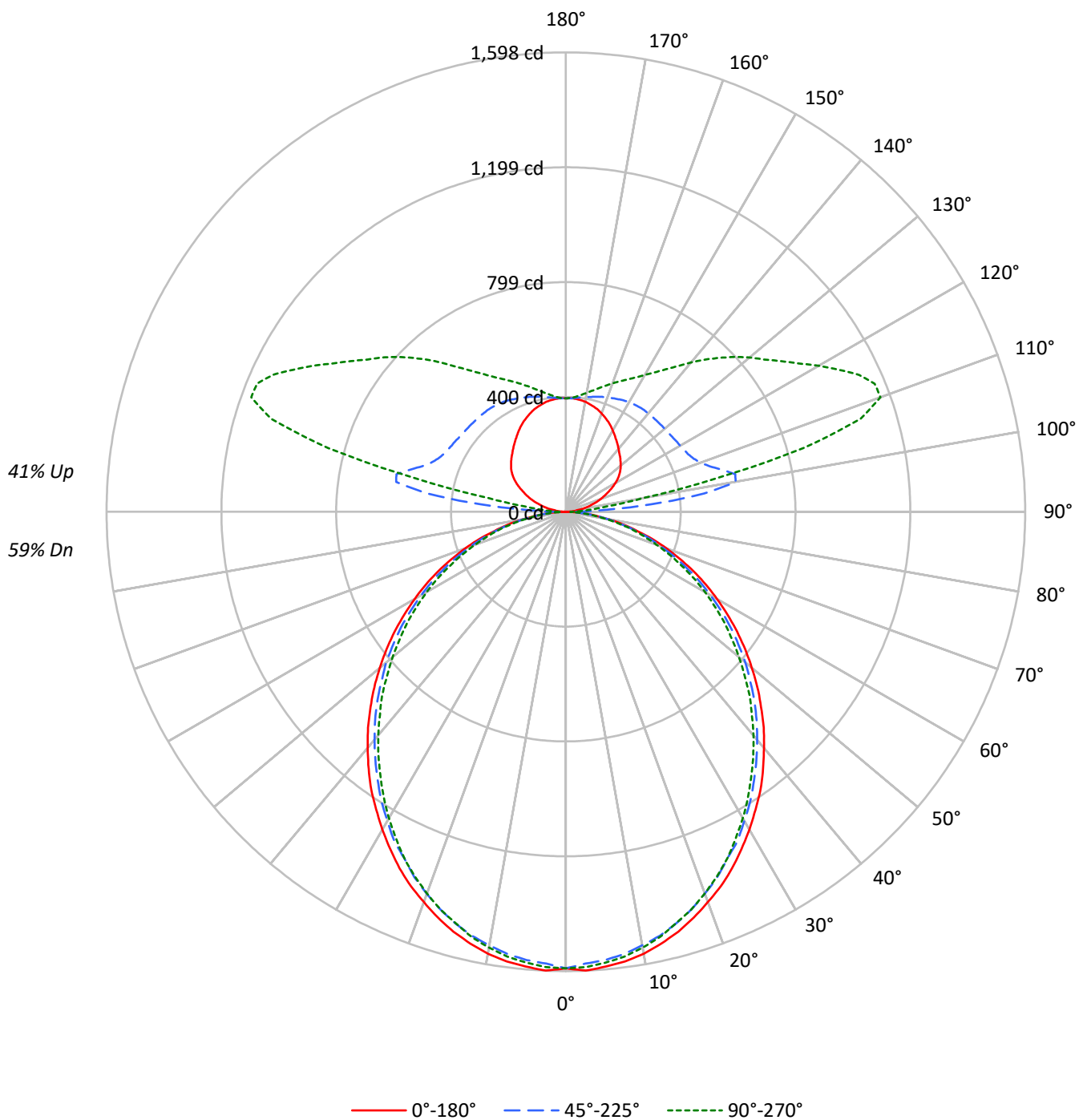
Lumens per Lamp: N/A
Luminaire Lumens: 6796.1 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	57	56	55
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39
4	76	65	57	51	71	61	54	48	53	48	43	47	42	39	40	37	34
5	70	58	50	44	65	54	47	42	48	42	37	42	37	33	36	32	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23
8	55	43	35	30	52	40	33	28	36	30	26	32	27	23	27	24	21
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25142	25142	25142
5°	25183	23965	23795
10°	24979	22873	22420
15°	24613	21773	20971
20°	24118	20575	19601
25°	23625	19325	18232
30°	23005	18152	16796
35°	22421	16912	15385
40°	21698	15689	14051
45°	20979	14475	12743
50°	20197	13242	11386
55°	19372	11922	10101
60°	18443	10493	8766
65°	17426	9040	7360
70°	16136	7451	5944
75°	14354	5744	4590
80°	12191	3903	2954
85°	8843	1817	1258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 20979 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.5	2.2
10°-20°	420.6	6.2
20°-30°	618.1	9.1
30°-40°	717.9	10.6
40°-50°	717.0	10.6
50°-60°	625.2	9.2
60°-70°	462.2	6.8
70°-80°	261.5	3.8
80°-90°	71.5	1.1
90°-100°	160.1	2.4
100°-110°	541.1	8.0
110°-120°	568.7	8.4
120°-130°	467.7	6.9
130°-140°	375.8	5.5
140°-150°	283.9	4.2
150°-160°	199.6	2.9
160°-170°	117.5	1.7
170°-180°	38.2	0.6
0°-30°	1188.2	17.5
0°-40°	1906.1	28.0
0°-60°	3248.3	47.8
0°-90°	4043.5	59.5
90°-120°	1269.9	18.7
90°-150°	2397.3	35.3
90°-180°	2753.0	40.5
0°-180°	6796.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1588	1588	1588	1588	1588	
5°	1588	1582	1565	1578	1575	151
15°	1512	1503	1483	1489	1481	426
25°	1368	1356	1330	1333	1330	630
35°	1181	1165	1141	1132	1124	737
45°	961	950	927	910	904	741
55°	727	718	700	681	674	650
65°	490	481	466	452	444	485
75°	257	254	246	237	240	274
85°	63	61	60	55	54	70
90°	1	10	26	25	25	6
95°	27	65	298	112	87	27
105°	93	140	563	1006	856	98
115°	163	206	471	972	1126	162
125°	228	270	452	787	913	202
135°	267	319	447	661	757	206
145°	305	351	445	552	604	191
155°	347	375	432	489	508	160
165°	378	390	414	439	446	107
175°	394	394	398	403	402	37
180°	395	395	395	395	395	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1588.3	1588.3	1588.3	1588.3	1588.3
2.5°	1597.5	1589.9	1573.1	1588.3	1585.3
5°	1588.3	1582.2	1565.4	1577.7	1574.6
7.5°	1577.7	1568.5	1551.7	1563.9	1560.9
10°	1560.9	1550.2	1531.8	1544.1	1539.5
12.5°	1537.9	1528.8	1510.5	1518.1	1515.0
15°	1512.0	1502.8	1483.0	1489.1	1481.4
17.5°	1479.9	1470.7	1450.9	1458.5	1450.9
20°	1444.8	1435.6	1414.2	1418.8	1412.7
22.5°	1409.7	1395.9	1376.1	1376.1	1373.0
25°	1368.4	1356.2	1330.2	1333.3	1330.2
27.5°	1322.6	1311.9	1292.1	1287.5	1279.8
30°	1276.8	1264.6	1241.7	1237.1	1231.0
32.5°	1227.9	1218.7	1194.3	1185.1	1179.0
35°	1180.6	1165.3	1140.9	1131.7	1124.1
37.5°	1127.1	1113.4	1088.9	1078.2	1070.6
40°	1072.1	1059.9	1035.5	1021.7	1015.6
42.5°	1018.7	1006.5	982.0	966.8	957.6
45°	960.6	950.0	927.0	910.2	904.1
47.5°	904.1	893.4	869.0	852.2	843.0
50°	844.6	836.9	815.6	794.2	786.5
52.5°	786.5	775.8	756.0	739.2	728.5
55°	727.0	717.8	699.5	681.2	673.5
57.5°	667.4	659.8	639.9	621.6	615.5
60°	607.8	601.7	580.4	563.6	559.0
62.5°	549.8	539.1	523.8	508.6	502.5
65°	490.2	481.1	465.8	452.1	444.4
67.5°	429.2	421.5	407.8	397.1	391.0
70°	372.6	366.5	352.8	342.1	336.0
72.5°	314.6	308.5	300.9	290.2	285.6
75°	256.6	253.5	245.9	236.7	239.8
77.5°	204.7	198.5	195.5	190.9	186.3
80°	152.7	151.2	148.1	143.6	140.5
82.5°	103.9	103.9	102.3	96.2	96.2
85°	62.6	61.1	59.6	55.0	53.5
87.5°	27.5	24.4	21.4	16.8	15.3
90°	0.8	10.2	25.8	24.7	25.1
92.5°	11.4	36.0	116.9	53.9	46.3
95°	26.6	65.3	297.6	112.4	86.6
97.5°	39.5	86.2	485.2	225.5	145.0
100°	58.5	105.6	599.8	449.1	271.8
102.5°	75.9	123.0	603.6	759.2	530.0
105°	92.6	139.7	562.6	1005.6	855.7
107.5°	110.9	156.4	524.6	1094.8	1075.1
110°	129.1	173.5	498.8	1080.4	1164.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	145.8	189.8	482.1	1031.4	1163.2
115°	163.2	206.2	470.7	971.5	1126.0
117.5°	181.5	222.4	464.7	914.1	1069.8
120°	198.2	238.4	459.3	862.8	1015.9
122.5°	214.1	254.7	456.3	823.0	959.7
125°	227.8	269.5	452.5	787.0	913.4
127.5°	239.2	283.6	450.2	756.2	870.1
130°	249.0	296.1	448.7	725.0	834.4
132.5°	258.1	308.2	448.0	692.8	797.2
135°	267.3	318.9	447.2	661.3	757.0
137.5°	275.6	328.0	447.2	629.4	718.2
140°	285.5	336.4	446.4	601.3	678.0
142.5°	295.3	343.2	446.4	574.4	637.8
145°	305.2	350.8	444.9	552.3	604.4
147.5°	315.8	356.8	442.6	533.0	574.8
150°	326.5	363.0	440.4	516.3	548.9
152.5°	337.1	369.0	436.6	502.2	526.9
155°	347.0	374.7	432.0	488.6	507.9
157.5°	355.3	379.2	427.5	475.7	491.2
160°	363.7	383.8	422.9	462.8	475.3
162.5°	372.0	387.2	419.1	450.6	460.1
165°	378.1	389.5	413.8	438.8	445.7
167.5°	383.4	391.8	409.2	428.2	432.0
170°	388.7	393.0	405.4	418.4	419.9
172.5°	391.8	394.0	400.9	409.6	410.0
175°	394.1	394.5	397.8	402.8	401.6
177.5°	395.6	394.8	394.8	397.8	395.6
180°	394.8	394.8	394.8	394.8	394.8

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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	17.27	18.23	18.14	19.12	20.25	18.05	19.01	18.92	19.90	21.03
	3H	18.62	19.47	19.50	20.37	21.53	19.69	20.54	20.57	21.44	22.60
	4H	19.03	19.83	19.92	20.74	21.91	20.28	21.09	21.18	22.00	23.16
	6H	19.25	20.00	20.16	20.91	22.09	20.69	21.44	21.60	22.35	23.53
	8H	19.28	19.99	20.20	20.92	22.10	20.80	21.51	21.72	22.44	23.62
	12H	19.28	19.95	20.20	20.88	22.08	20.85	21.53	21.77	22.45	23.65
4H	2H	17.75	18.56	18.66	19.47	20.63	18.40	19.20	19.30	20.11	21.28
	3H	19.28	19.95	20.19	20.89	22.07	20.18	20.86	21.10	21.80	22.98
	4H	19.79	20.40	20.71	21.34	22.54	20.87	21.49	21.79	22.42	23.62
	6H	20.09	20.63	21.03	21.59	22.79	21.37	21.90	22.31	22.86	24.07
	8H	20.15	20.65	21.10	21.60	22.82	21.52	22.01	22.46	22.96	24.18
	12H	20.16	20.61	21.12	21.58	22.80	21.58	22.03	22.54	23.00	24.22
8H	4H	19.97	20.47	20.91	21.42	22.64	20.96	21.46	21.90	22.41	23.63
	6H	20.36	20.77	21.33	21.76	22.98	21.53	21.95	22.50	22.94	24.16
	8H	20.46	20.82	21.44	21.81	23.04	21.72	22.09	22.70	23.07	24.31
	12H	20.50	20.82	21.48	21.79	23.08	21.83	22.15	22.81	23.12	24.41
12H	4H	19.96	20.41	20.92	21.37	22.60	20.93	21.38	21.89	22.35	23.57
	6H	20.38	20.74	21.35	21.72	22.96	21.53	21.89	22.50	22.87	24.11
	8H	20.49	20.81	21.47	21.79	23.07	21.73	22.05	22.71	23.02	24.31

END OF REPORT