

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: P1012110

Luminaire Tested: S123DIP-B775D805UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012110
REPORT IS A COMBINATION OF REPORTS P990515 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D805UB50-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

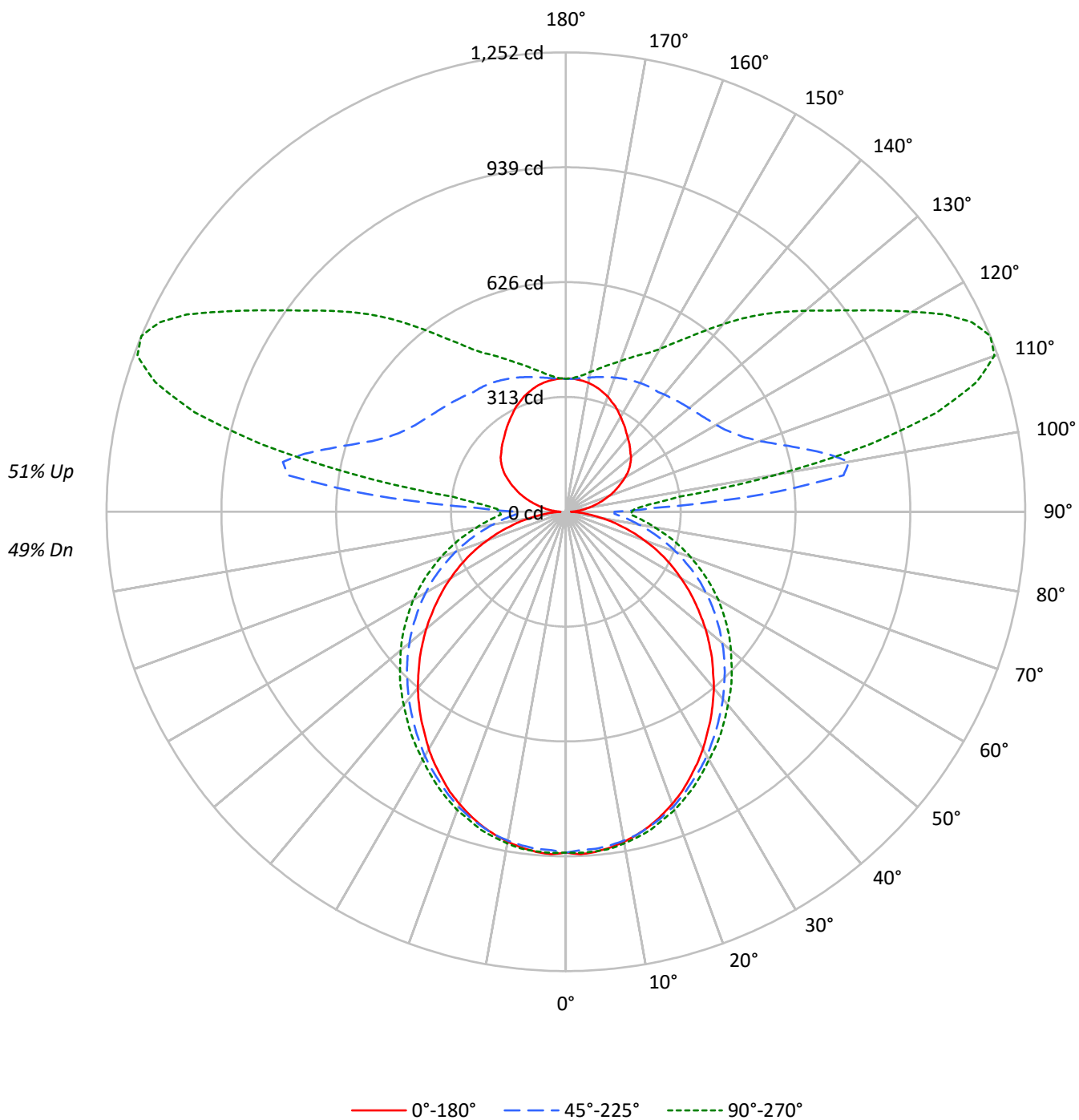
Lumens per Lamp: N/A
Luminaire Lumens: 5859.3 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 57
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	96	92	87	84	89	84	81	77	71	68	66	59	57	55	47	46	44
2	87	80	73	67	80	73	68	63	62	57	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26
5	67	54	46	40	61	50	43	37	43	37	32	35	31	27	29	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	22	20
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	26	22	19	22	18	16
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10002	10002	10002
5°	10030	9709	9701
10°	9936	9446	9374
15°	9804	9155	9027
20°	9618	8832	8654
25°	9388	8467	8268
30°	9152	8137	7880
35°	8889	7791	7564
40°	8637	7475	7231
45°	8358	7168	6956
50°	8082	6864	6658
55°	7777	6552	6384
60°	7478	6234	6102
65°	7170	5895	5773
70°	6708	5515	5434
75°	6121	5079	5083
80°	5440	4642	4684
85°	4764	4286	4397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	1.5
10°-20°	251.3	4.3
20°-30°	375.8	6.4
30°-40°	448.7	7.7
40°-50°	469.4	8.0
50°-60°	440.5	7.5
60°-70°	368.0	6.3
70°-80°	263.1	4.5
80°-90°	158.6	2.7
90°-100°	304.5	5.2
100°-110°	648.3	11.1
110°-120°	610.0	10.4
120°-130°	474.8	8.1
130°-140°	365.4	6.2
140°-150°	266.0	4.5
150°-160°	183.8	3.1
160°-170°	107.9	1.8
170°-180°	35.1	0.6
0°-30°	715.2	12.2
0°-40°	1163.9	19.9
0°-60°	2073.9	35.4
0°-90°	2863.6	48.9
90°-120°	1562.8	26.7
90°-150°	2668.9	45.6
90°-180°	2996.0	51.1
0°-180°	5859.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	930	928	922	930	929	88
15°	886	889	888	898	897	250
25°	800	810	813	826	826	369
35°	688	704	718	733	737	430
45°	563	587	612	632	640	434
55°	429	463	499	526	534	384
65°	297	336	381	411	421	293
75°	161	208	259	292	305	172
85°	50	100	154	188	198	51
90°	15	72	133	169	180	11
95°	36	132	536	259	227	35
105°	93	158	666	1136	1047	99
115°	156	205	505	1068	1222	154
125°	212	250	454	817	956	189
135°	247	294	428	659	762	191
145°	281	320	410	524	580	176
155°	318	343	397	452	471	146
165°	347	357	380	403	410	98
175°	362	362	365	370	369	34
180°	363	363	363	363	363	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	929.2	929.2	929.2	929.2	929.2
2.5°	934.3	931.3	923.2	931.3	930.3
5°	930.3	928.2	922.2	930.3	929.2
7.5°	923.2	923.2	917.1	927.2	926.2
10°	913.1	915.1	910.0	920.1	918.1
12.5°	900.9	903.9	900.9	910.0	908.0
15°	885.7	888.8	887.7	897.9	896.9
17.5°	867.5	873.6	872.6	881.7	879.6
20°	847.3	853.3	855.4	864.5	865.5
22.5°	826.0	832.1	835.1	847.3	846.2
25°	799.7	809.8	812.8	826.0	826.0
27.5°	774.4	785.5	791.6	802.7	803.7
30°	747.0	760.2	768.3	780.4	780.4
32.5°	716.7	731.9	743.0	756.2	759.2
35°	688.3	704.5	717.7	732.9	736.9
37.5°	658.0	676.2	691.4	708.6	711.6
40°	627.6	645.8	666.1	683.3	687.3
42.5°	594.2	617.5	638.7	658.0	664.0
45°	562.8	587.1	612.4	631.6	639.7
47.5°	529.4	556.7	585.1	606.3	612.4
50°	497.0	525.4	556.7	580.0	587.1
52.5°	462.6	493.0	528.4	552.7	561.8
55°	429.2	462.6	499.0	526.4	534.5
57.5°	396.8	431.2	470.7	498.0	507.1
60°	362.4	398.8	440.3	468.7	479.8
62.5°	330.0	367.4	412.0	440.3	450.5
65°	296.6	336.1	380.6	411.0	421.1
67.5°	263.2	304.7	349.2	382.6	390.7
70°	227.8	271.3	319.9	352.3	362.4
72.5°	195.4	238.9	289.5	322.9	333.0
75°	160.9	208.5	259.1	292.5	304.7
77.5°	131.6	179.2	229.8	265.2	274.3
80°	100.2	149.8	202.5	236.9	247.0
82.5°	72.9	123.5	177.1	211.6	221.7
85°	49.6	100.2	153.9	188.3	198.4
87.5°	30.4	81.0	132.6	167.0	177.1
90°	14.7	71.6	132.8	169.4	180.2
92.5°	23.1	99.8	242.8	186.3	187.7
95°	36.1	131.7	535.5	258.6	226.9
97.5°	49.7	139.5	763.6	443.8	309.3
100°	63.4	143.9	783.3	785.4	587.8
102.5°	77.8	149.8	729.5	1004.8	849.5
105°	93.3	158.3	666.1	1136.5	1047.2
107.5°	108.4	168.9	609.4	1190.0	1173.7
110°	125.0	180.0	562.5	1185.7	1243.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.2	191.6	528.5	1137.1	1252.3
115°	155.6	204.8	505.1	1067.9	1221.7
117.5°	171.0	216.2	486.6	994.4	1164.3
120°	186.1	227.5	473.4	924.4	1089.7
122.5°	200.0	239.2	463.3	868.0	1020.4
125°	212.2	250.0	453.8	817.1	956.3
127.5°	222.5	262.2	446.5	774.4	900.4
130°	232.1	274.0	439.3	734.6	852.2
132.5°	238.4	284.6	433.5	696.8	806.7
135°	247.2	293.6	427.6	659.2	761.5
137.5°	255.3	301.6	422.2	622.2	715.1
140°	262.4	309.0	417.3	587.1	667.4
142.5°	271.2	314.6	411.9	553.5	621.7
145°	280.7	320.4	410.4	523.8	579.6
147.5°	289.2	326.6	408.2	499.6	543.8
150°	298.8	331.8	405.2	479.8	512.2
152.5°	308.3	337.4	401.6	465.1	488.2
155°	317.9	342.8	397.2	451.5	470.6
157.5°	325.2	347.6	393.5	438.3	453.7
160°	334.0	351.6	389.1	426.2	437.5
162.5°	340.6	354.6	384.7	414.8	422.9
165°	347.2	357.2	380.3	403.4	410.4
167.5°	352.4	359.4	375.9	393.5	397.9
170°	356.8	360.4	371.5	384.7	386.9
172.5°	359.7	361.5	367.8	377.0	376.6
175°	361.9	362.3	364.9	370.0	369.3
177.5°	363.4	362.7	362.7	365.6	364.1
180°	362.7	362.7	362.7	362.7	362.7

(END OF REPORT)