

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: P1031980

Luminaire Tested: S123DIW-B775D755UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031980
REPORT IS A COMBINATION OF REPORTS P992163 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D755UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

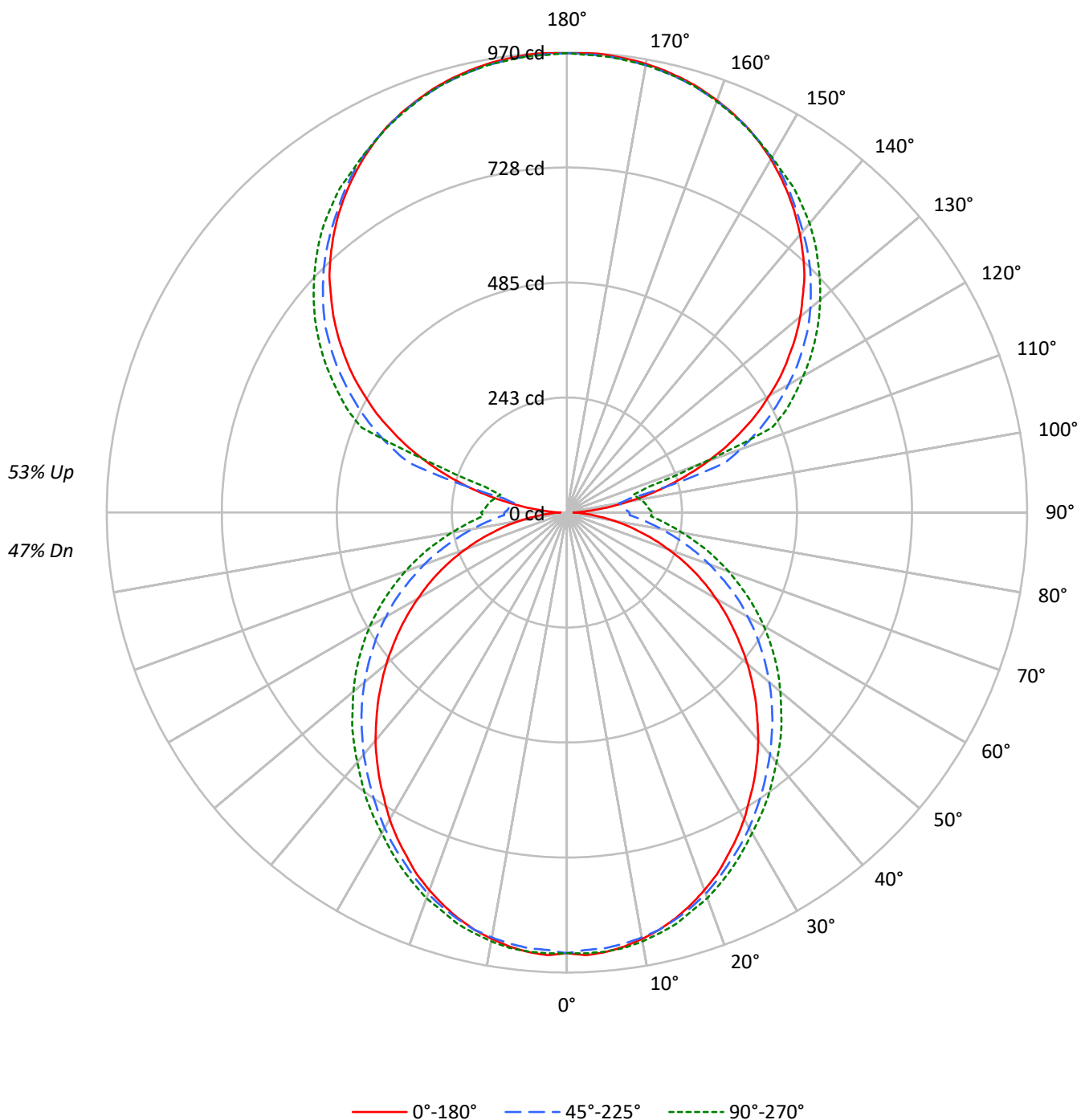
Lumens per Lamp: N/A
Luminaire Lumens: 6078.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53
1	96	91	87	83	88	84	80	77	70	67	65	57	56	54	46	44	43
2	87	79	73	67	80	73	67	62	61	57	53	50	47	44	40	37	36
3	79	69	62	56	72	64	57	52	53	48	44	44	40	37	35	32	30
4	72	61	53	47	66	56	49	44	47	42	37	39	35	31	31	28	25
5	66	54	46	40	61	50	43	37	42	36	32	35	30	27	28	25	22
6	61	49	40	34	56	45	37	32	38	32	28	31	27	23	25	22	19
7	56	44	36	30	51	40	33	28	34	29	24	28	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	26	22	26	22	18	21	18	15
9	49	36	29	23	44	34	27	22	29	23	19	24	20	16	19	16	14
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12

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	4.1
20°-30°	375.8	6.2
30°-40°	448.7	7.4
40°-50°	469.4	7.7
50°-60°	440.5	7.2
60°-70°	368.0	6.1
70°-80°	263.1	4.3
80°-90°	158.5	2.6
90°-100°	132.5	2.2
100°-110°	237.5	3.9
110°-120°	453.0	7.5
120°-130°	541.3	8.9
130°-140°	561.2	9.2
140°-150°	515.8	8.5
150°-160°	414.0	6.8
160°-170°	267.2	4.4
170°-180°	92.1	1.5
0°-30°	715.2	11.8
0°-40°	1163.9	19.1
0°-60°	2073.9	34.1
0°-90°	2863.5	47.1
90°-120°	823.0	13.5
90°-150°	2441.3	40.2
90°-180°	3215.0	52.9
0°-180°	6078.0	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°	14	71	132	169	180	12
95°	55	65	122	159	169	61
105°	223	255	234	134	145	236
115°	407	424	467	498	509	403
125°	570	576	608	631	639	510
135°	708	711	725	746	749	545
145°	816	820	821	831	835	510
155°	897	896	897	900	896	414
165°	946	944	944	949	944	267
175°	969	965	966	971	965	92
180°	969	969	969	969	969	

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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°	13.9	70.7	131.7	169.0	180.5
92.5°	28.7	67.9	125.0	163.4	173.3
95°	55.0	65.0	122.5	158.9	169.0
97.5°	90.0	106.3	117.1	153.3	164.1
100°	130.7	177.5	111.8	146.9	157.7
102.5°	177.2	214.9	135.3	139.8	151.4
105°	222.6	254.8	233.5	134.5	145.1
107.5°	269.8	297.5	349.7	266.3	181.1
110°	317.0	341.0	389.4	391.9	297.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	363.1	382.2	428.6	460.4	468.0
115°	407.4	423.8	466.7	498.2	509.2
117.5°	452.0	465.1	503.1	533.2	542.0
120°	491.9	503.5	539.1	568.1	575.2
122.5°	533.7	540.8	575.1	600.9	608.7
125°	570.1	575.9	608.1	630.8	639.3
127.5°	607.5	612.3	641.2	663.6	669.3
130°	642.1	646.8	670.0	692.1	696.7
132.5°	674.2	679.9	697.3	718.4	723.3
135°	708.0	711.3	725.3	745.7	748.6
137.5°	736.8	741.5	750.1	769.9	773.5
140°	764.6	768.9	774.0	792.1	795.8
142.5°	791.2	794.5	796.7	812.0	814.9
145°	815.7	819.7	821.1	830.7	834.7
147.5°	838.4	842.0	843.4	847.9	848.4
150°	860.0	862.2	863.6	865.0	864.9
152.5°	879.4	880.1	880.9	883.7	880.1
155°	897.4	896.0	896.7	900.3	896.0
157.5°	911.8	911.8	911.1	915.4	909.7
160°	924.8	924.0	923.3	927.6	922.6
162.5°	937.0	934.8	934.1	939.2	934.8
165°	946.4	944.2	943.5	949.2	944.2
167.5°	954.3	951.4	951.4	957.2	951.4
170°	960.8	957.9	957.9	963.6	957.9
172.5°	965.1	961.5	962.2	967.9	961.5
175°	968.7	965.1	965.8	970.8	965.1
177.5°	970.1	966.5	967.2	973.0	965.8
180°	968.7	968.7	968.7	968.7	968.7

(END OF REPORT)