

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P199436

Luminaire Tested: **S122-DIW-ULO-LO-40-0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199436
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27883 P27883)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DIW-ULO-LO-40-0048-1D-UDD-1-5-W
Description: DEFINE 2-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LLO-4000K, SATIN WHITE DIFFUSER
DOWNLIGHT LLO-4000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

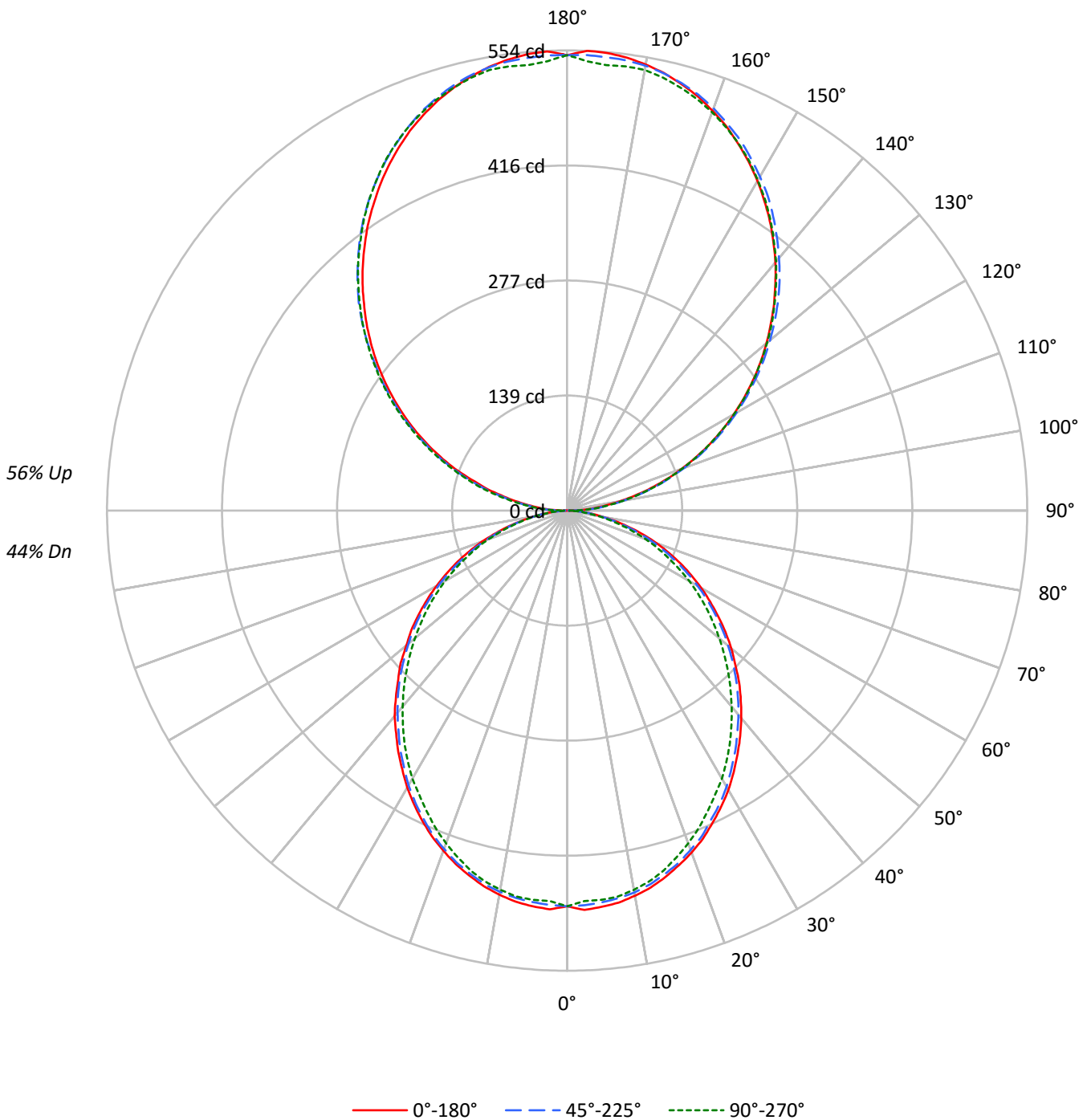
Lumens per Lamp: N/A
Luminaire Lumens: 2773.2 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.17 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

Input Watts (W): 26.9
Input Voltage (V): NR
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: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44																				
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	37																				
2	88	81	75	69	80	74	69	64	62	58	55	50	47	45	40	38	36	31																				
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27																				
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23																				
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	20																				
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17																				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15																				
8	53	41	33	28	49	38	31	26	32	27	23	27	22	19	21	18	16	14																				
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15	12																				
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7535	7535	7535
5°	7543	6241	7532
10°	7441	5329	7423
15°	7300	4584	7271
20°	7135	3945	7098
25°	6936	3404	6900
30°	6734	2959	6677
35°	6489	2560	6429
40°	6251	2202	6194
45°	6000	1884	5894
50°	5720	1598	5598
55°	5407	1338	5317
60°	5087	1097	4956
65°	4699	862	4540
70°	4217	648	4014
75°	3523	436	3286
80°	2623	254	2384
85°	1629	100	1372



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	1.6
10°-20°	127.1	4.6
20°-30°	187.5	6.8
30°-40°	218.7	7.9
40°-50°	219.1	7.9
50°-60°	191.7	6.9
60°-70°	141.0	5.1
70°-80°	76.5	2.8
80°-90°	19.6	0.7
90°-100°	38.0	1.4
100°-110°	111.6	4.0
110°-120°	187.6	6.8
120°-130°	244.7	8.8
130°-140°	272.8	9.8
140°-150°	266.8	9.6
150°-160°	224.4	8.1
160°-170°	149.2	5.4
170°-180°	51.9	1.9
0°-30°	359.6	13.0
0°-40°	578.3	20.9
0°-60°	989.1	35.7
0°-90°	1226.2	44.2
90°-120°	337.2	12.2
90°-150°	1121.5	40.4
90°-180°	1547.0	55.8
0°-180°	2773.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	476	476	476	476	476	
5°	479	473	470	473	478	45
15°	457	453	449	452	455	129
25°	414	410	400	409	412	191
35°	358	353	342	350	354	224
45°	293	288	274	285	288	226
55°	222	218	204	214	218	199
65°	150	144	134	140	145	149
75°	77	74	67	69	72	82
85°	18	17	15	15	16	21
90°	1	2	3	2	0	4
95°	32	36	36	34	30	33
105°	105	109	108	104	98	110
115°	190	193	190	187	183	187
125°	273	277	274	272	267	244
135°	352	359	353	355	345	272
145°	426	432	427	428	418	266
155°	487	493	488	487	481	225
165°	532	533	527	530	527	150
175°	553	548	538	547	552	53
180°	548	548	548	548	548	



TEST NUMBER: P199436

CATALOG NUMBER: S122-DIW-ULO-LO-40-0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	481.2	474.5	475.6	474.2	470.5	473.8	475.3	474.2	480.4
5°	478.9	472.3	473.4	471.6	470.5	471.6	473.1	471.6	478.2
7.5°	476.0	468.6	470.8	469.7	468.6	469.4	470.5	467.9	474.9
10°	470.8	463.5	466.8	464.6	463.5	464.2	466.1	462.4	469.7
12.5°	464.9	457.6	460.9	458.3	457.2	457.2	460.5	456.5	463.1
15°	456.8	450.9	453.2	450.6	448.7	449.8	452.4	449.5	455.0
17.5°	447.6	442.5	445.1	441.0	437.7	440.3	443.9	440.6	446.2
20°	438.1	432.2	434.7	429.2	426.3	428.5	433.3	430.7	435.8
22.5°	427.4	421.8	424.1	416.7	413.7	415.6	422.6	420.0	424.8
25°	414.5	410.1	410.4	403.1	399.7	401.9	409.3	407.8	412.3
27.5°	401.9	397.5	397.9	389.4	385.7	388.7	396.1	394.9	399.0
30°	388.3	384.3	383.9	375.4	372.5	374.3	381.7	381.7	385.0
32.5°	373.2	369.9	368.1	360.3	357.4	359.6	365.8	366.9	369.5
35°	357.7	355.5	352.9	345.6	341.5	344.5	350.4	351.8	354.4
37.5°	342.3	339.7	336.7	329.4	324.9	328.6	333.8	336.4	338.2
40°	326.1	324.2	320.9	313.5	308.0	311.7	317.6	320.5	323.1
42.5°	309.5	308.4	304.3	296.6	291.1	295.1	301.4	303.9	305.1
45°	292.9	291.4	287.7	279.6	273.7	278.2	284.8	287.4	287.7
47.5°	274.5	274.8	270.4	262.3	256.4	260.8	266.7	270.4	271.9
50°	257.9	258.3	253.1	245.0	239.1	242.4	249.4	253.1	252.4
52.5°	240.2	241.3	235.8	227.7	221.8	225.1	232.1	236.2	236.5
55°	221.8	223.6	217.7	209.6	204.5	207.8	213.7	218.5	218.1
57.5°	204.1	205.6	199.7	192.3	187.2	190.1	195.3	201.5	200.1
60°	186.4	187.9	181.6	174.3	169.8	171.3	177.2	182.4	181.6
62.5°	168.4	169.8	163.2	156.6	151.4	153.6	158.8	165.1	163.2
65°	150.3	151.4	144.4	138.5	134.1	136.3	140.0	146.6	145.2
67.5°	132.3	133.0	126.7	121.2	117.5	118.6	121.9	127.5	126.7
70°	114.2	114.9	109.1	103.9	100.6	101.7	104.3	109.4	108.7
72.5°	95.8	96.9	91.0	86.2	82.9	84.0	85.8	90.6	89.5
75°	77.4	78.1	73.7	70.0	67.1	67.4	68.9	72.6	72.2
77.5°	60.4	62.3	57.5	54.2	51.9	52.3	54.2	56.0	55.3
80°	43.8	46.1	42.7	40.2	38.3	37.9	39.4	40.9	39.8
82.5°	30.9	31.3	29.1	27.3	25.4	25.4	26.5	27.6	26.5
85°	18.4	19.2	17.3	15.8	14.7	14.4	15.1	16.2	15.5
87.5°	8.8	9.2	7.4	6.6	5.5	5.2	5.5	6.3	6.3
90°	0.7	1.8	1.8	2.2	2.6	2.6	2.2	2.2	0.4
92.5°	19.9	22.1	23.2	22.5	22.1	21.0	21.0	19.9	17.7
95°	31.7	35.0	36.5	36.1	36.1	34.6	34.3	33.2	29.8
97.5°	46.8	50.5	51.6	51.9	51.6	49.7	48.6	47.5	43.8
100°	64.1	67.8	68.9	68.9	68.5	66.7	65.2	63.7	59.7
102.5°	83.3	86.9	88.1	87.3	87.3	84.7	83.3	82.2	77.7
105°	104.6	108.3	109.1	107.9	107.6	105.0	103.9	102.4	98.4
107.5°	125.3	128.9	128.6	128.2	126.7	124.9	124.2	121.9	116.8
110°	146.6	151.4	149.6	148.8	147.4	145.5	144.8	144.1	140.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	168.0	173.2	170.9	170.2	168.4	166.2	166.2	165.8	161.7
115°	189.7	194.9	192.7	191.2	189.7	187.5	187.2	187.5	183.1
117.5°	210.7	216.6	214.1	212.2	210.7	208.2	208.5	209.3	204.5
120°	231.7	238.4	235.4	233.2	232.1	229.2	229.5	231.0	225.5
122.5°	252.4	259.0	256.4	254.2	253.1	249.8	250.5	251.3	246.1
125°	273.0	279.6	277.4	274.8	273.7	271.5	271.9	271.9	266.7
127.5°	293.3	299.9	298.4	295.5	294.0	291.1	292.5	291.4	287.0
130°	313.2	319.4	318.7	315.4	314.3	312.4	313.5	310.2	306.9
132.5°	332.7	338.9	339.3	335.6	334.2	332.3	334.5	330.8	326.4
135°	352.2	357.7	359.2	355.2	353.3	351.8	354.8	348.9	345.2
137.5°	371.0	375.4	378.7	373.9	372.5	369.9	373.6	367.7	364.4
140°	390.2	393.8	396.8	393.1	391.3	389.1	392.0	386.1	382.8
142.5°	407.8	411.9	414.8	411.2	408.9	407.1	410.1	403.8	400.8
145°	425.5	428.8	432.5	429.2	427.0	425.2	427.7	421.5	418.5
147.5°	442.1	445.1	449.5	445.8	443.6	442.1	443.9	437.7	435.1
150°	458.3	459.8	464.2	462.0	459.1	457.6	459.1	453.5	451.3
152.5°	473.4	474.5	478.6	476.0	474.5	471.9	473.8	468.3	466.8
155°	487.4	487.8	492.6	489.6	487.8	485.9	487.4	483.0	481.2
157.5°	500.7	500.7	504.0	502.5	499.6	498.8	499.9	495.2	494.8
160°	512.1	511.4	515.4	512.8	510.3	509.5	511.4	506.9	506.6
162.5°	522.8	521.3	525.0	521.7	519.5	518.7	521.3	517.3	517.6
165°	531.6	529.8	532.7	529.4	527.2	526.8	529.8	525.7	527.2
167.5°	539.4	536.4	539.0	535.7	533.8	533.5	536.8	533.1	535.3
170°	545.3	541.6	543.8	539.4	538.6	537.9	541.9	538.6	542.3
172.5°	550.1	546.0	546.7	541.9	539.4	540.8	545.3	543.4	547.5
175°	553.0	548.6	547.8	542.7	538.3	541.6	547.1	546.7	551.5
177.5°	554.1	550.1	548.9	543.1	541.6	542.3	548.6	548.9	553.4
180°	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2

(END OF REPORT)