

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: P199570

Luminaire Tested: **S125-DIP-ULO-LO-35-X-X0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199570  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27899)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-DIP-ULO-LO-35-X-X0048-1D-UDD-1-NA-W  
Description: DEFINE 5-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE  
UPLIGHT LLO-3500K, NO LENS  
DOWNLIGHT LLO-3500K, SATIN WHITE DIFFUSER  
Light Source: -  
757G  
Ballast/Driver: ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3273.3 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')  
CIE Type: General Diffuse

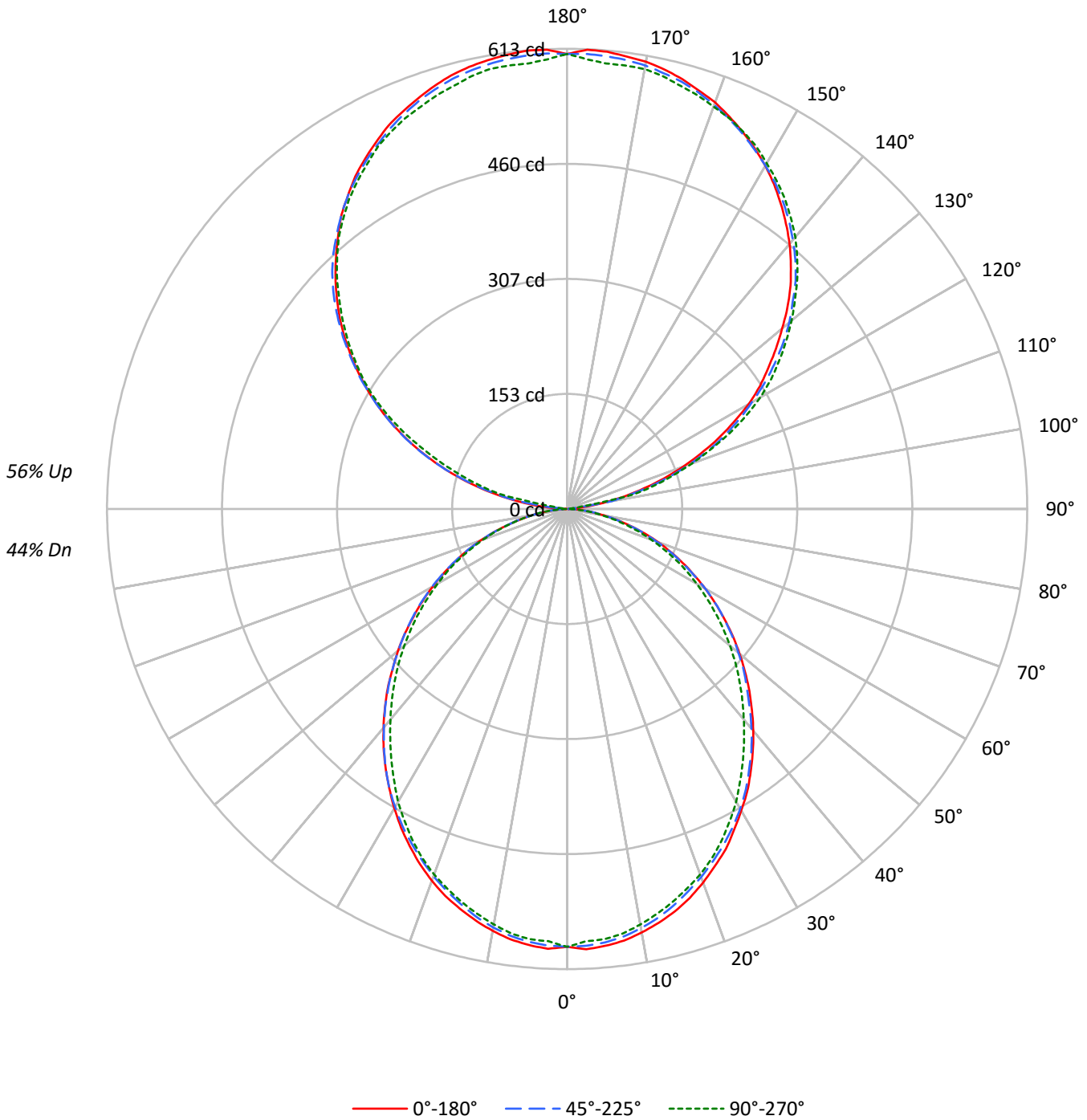
Input Watts (W): 26.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	81	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	64	62	58	55	50	48	45	40	38	36	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	3690	3690	3690
5°	3680	3387	3674
10°	3621	3116	3608
15°	3548	2861	3525
20°	3450	2628	3434
25°	3347	2396	3318
30°	3219	2165	3194
35°	3095	1934	3059
40°	2958	1723	2918
45°	2813	1529	2772
50°	2660	1344	2609
55°	2495	1163	2436
60°	2319	985	2255
65°	2125	813	2049
70°	1898	631	1808
75°	1591	448	1482
80°	1205	279	1102
85°	719	122	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.8	1.7
10°-20°	153.9	4.7
20°-30°	226.2	6.9
30°-40°	261.2	8.0
40°-50°	258.9	7.9
50°-60°	224.6	6.9
60°-70°	164.0	5.0
70°-80°	89.6	2.7
80°-90°	23.3	0.7
90°-100°	19.2	0.6
100°-110°	128.7	3.9
110°-120°	236.1	7.2
120°-130°	306.1	9.4
130°-140°	332.6	10.2
140°-150°	314.4	9.6
150°-160°	255.7	7.8
160°-170°	166.3	5.1
170°-180°	57.5	1.8
0°-30°	434.9	13.3
0°-40°	696.2	21.3
0°-60°	1179.6	36.0
0°-90°	1456.6	44.5
90°-120°	384.1	11.7
90°-150°	1337.2	40.9
90°-180°	1817.0	55.5
0°-180°	3273.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	583	583	583	583	583	
5°	584	580	575	579	583	55
15°	555	547	542	545	551	156
25°	500	493	487	491	496	230
35°	426	423	408	422	422	267
45°	343	339	325	337	338	265
55°	256	256	241	251	250	229
65°	170	168	159	164	164	168
75°	87	87	80	82	81	93
85°	20	21	19	19	18	23
90°	1	1	1	1	1	2
95°	13	4	4	6	30	19
105°	106	112	120	132	135	112
115°	222	232	238	250	249	219
125°	327	337	345	352	350	293
135°	421	430	434	443	436	324
145°	496	501	505	509	509	311
155°	554	552	555	559	564	255
165°	593	589	584	593	598	167
175°	611	605	596	606	613	58
180°	606	606	606	606	606	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2	583.2
2.5°	587.1	581.0	582.5	581.4	576.4	580.7	582.1	580.0	586.4
5°	584.2	578.2	579.6	578.2	575.3	577.5	578.9	576.7	583.2
7.5°	580.0	573.5	574.6	573.2	570.3	572.1	573.9	571.8	578.2
10°	572.8	566.8	567.1	565.3	562.1	564.3	566.0	564.3	570.7
12.5°	564.6	558.2	558.2	555.3	552.5	554.3	556.8	555.3	561.8
15°	555.0	548.2	547.1	545.3	542.1	544.3	545.3	545.0	551.4
17.5°	543.2	536.1	534.6	534.3	530.4	533.2	533.6	532.5	540.3
20°	529.6	522.9	521.8	521.4	518.2	520.4	520.4	518.9	527.1
22.5°	514.6	508.2	507.9	507.2	503.6	506.1	506.1	503.9	512.2
25°	500.0	492.2	493.2	491.5	487.2	490.7	491.1	487.5	495.7
27.5°	481.8	475.7	477.9	474.7	469.0	473.6	475.7	470.4	479.0
30°	464.0	457.5	461.1	455.4	450.4	454.7	458.6	451.8	460.4
32.5°	446.5	439.0	443.3	436.1	429.0	434.3	440.8	434.3	441.1
35°	426.5	420.4	422.9	415.4	408.3	413.6	421.5	415.4	421.5
37.5°	406.5	401.5	403.3	394.4	387.2	392.6	400.8	396.2	401.5
40°	385.8	382.2	382.2	373.3	366.2	371.2	379.7	377.2	380.5
42.5°	364.4	363.0	360.1	352.3	345.5	350.5	358.7	358.0	359.4
45°	343.3	343.3	338.7	330.5	324.8	329.4	336.9	338.7	338.3
47.5°	321.6	323.4	319.4	310.5	304.1	308.7	315.5	318.7	315.1
50°	299.8	303.0	298.0	290.2	283.0	288.0	293.7	298.0	294.1
52.5°	278.0	282.0	276.6	269.1	262.0	266.6	272.3	277.3	272.3
55°	255.9	260.5	255.5	247.7	240.9	245.2	250.9	255.9	249.8
57.5°	234.1	238.4	234.1	226.3	219.9	223.8	229.8	233.8	228.4
60°	212.4	217.0	212.7	205.2	199.2	202.4	208.1	212.0	206.6
62.5°	190.9	194.9	190.2	184.2	179.5	180.9	186.3	190.9	185.2
65°	169.9	173.5	168.5	163.1	159.2	159.9	164.5	167.0	163.8
67.5°	149.2	153.1	147.8	142.8	138.1	139.5	143.5	147.0	143.1
70°	128.5	132.4	126.7	122.4	118.5	119.2	122.4	126.3	122.4
72.5°	108.1	111.4	107.4	102.4	99.6	100.3	102.1	105.6	101.7
75°	87.4	91.0	86.7	82.8	79.9	80.7	81.7	84.6	81.4
77.5°	68.2	70.7	67.8	64.6	62.8	63.2	63.5	65.7	62.8
80°	50.3	52.5	50.7	48.2	46.8	46.8	46.8	48.5	46.0
82.5°	34.3	36.4	35.0	33.2	32.1	31.1	31.8	33.2	31.1
85°	20.3	22.1	21.4	19.6	18.9	18.2	18.9	19.6	17.8
87.5°	9.3	10.7	9.6	7.9	7.1	6.4	6.4	7.5	6.1
90°	0.7	1.8	1.4	1.1	0.7	0.7	1.1	1.4	0.7
92.5°	1.8	2.5	2.5	2.9	2.9	3.2	3.6	4.3	12.1
95°	12.8	14.3	3.9	4.3	4.3	4.6	6.1	34.6	29.6
97.5°	29.6	37.8	12.5	7.5	6.8	10.0	38.5	55.0	52.1
100°	52.8	58.9	59.6	38.9	26.4	54.6	76.0	82.1	78.2
102.5°	78.2	84.9	83.2	90.3	92.8	100.6	102.4	110.3	107.1
105°	105.6	113.1	112.1	119.2	119.9	128.8	132.4	137.0	135.3
107.5°	134.6	139.9	142.8	147.4	147.0	156.7	163.8	166.0	164.2
110°	164.2	167.7	173.1	176.3	176.3	185.9	194.2	194.5	192.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	192.4	198.4	203.4	207.4	206.6	217.0	222.7	223.8	221.6
115°	222.3	224.8	231.6	237.3	238.4	246.3	250.2	251.3	249.1
117.5°	249.8	253.8	258.0	264.8	268.4	273.4	276.2	278.0	275.9
120°	279.1	281.6	284.1	290.5	296.9	299.8	301.9	303.4	301.6
122.5°	304.4	306.2	311.6	315.9	322.3	324.4	327.6	327.3	325.8
125°	326.9	329.4	337.3	339.8	345.1	348.0	351.9	349.8	349.8
127.5°	350.5	352.6	362.6	363.0	368.0	371.2	376.2	372.6	373.0
130°	373.7	377.2	386.2	386.2	390.1	393.7	399.4	394.0	395.4
132.5°	398.3	399.4	407.6	407.9	411.5	415.1	421.9	414.7	416.1
135°	420.8	419.7	430.4	428.6	433.6	435.8	442.6	434.0	436.5
137.5°	441.1	438.6	450.1	448.3	453.6	454.0	461.1	452.9	455.8
140°	461.1	458.3	467.9	466.8	472.9	472.2	477.5	470.8	474.7
142.5°	479.0	475.7	485.0	484.7	489.3	489.3	493.9	488.2	493.9
145°	496.4	492.2	500.7	500.4	505.4	505.0	509.3	503.9	509.3
147.5°	512.9	508.6	515.4	514.6	518.9	519.3	522.9	519.6	525.4
150°	527.9	523.9	528.2	527.9	531.8	532.1	535.7	534.3	538.6
152.5°	541.4	537.8	540.0	539.3	545.0	542.8	547.1	546.4	551.1
155°	553.9	550.3	552.1	550.7	554.6	554.3	558.9	558.2	563.5
157.5°	565.3	561.4	562.8	560.7	563.5	563.5	568.9	568.9	572.8
160°	576.4	571.0	572.8	569.3	570.3	571.8	578.2	578.2	581.7
162.5°	584.2	580.7	581.7	576.7	577.8	578.5	586.0	586.0	590.3
165°	592.8	588.2	589.2	583.2	583.5	585.3	592.8	593.2	597.8
167.5°	599.6	595.0	594.6	588.5	590.3	590.7	597.8	598.2	603.2
170°	604.9	599.9	599.9	593.5	595.0	594.2	601.7	602.8	607.1
172.5°	607.8	604.2	603.2	596.0	595.7	596.7	604.6	606.0	610.3
175°	611.4	607.1	605.3	598.5	595.7	599.2	606.4	607.8	612.8
177.5°	612.4	608.2	606.7	599.6	599.6	600.3	607.4	608.5	612.4
180°	606.0	606.0	606.0	606.0	606.0	606.0	606.0	606.0	606.0

(END OF REPORT)