

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: P199384

Luminaire Tested: **S122-DIP-U1-1-30-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199384
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-DIP-U1-1-30-X-X0048-1D-UDD-1-5-W
Description: DEFINE 2-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE
UPLIGHT LL1-3000K, SATIN WHITE DIFFUSER
DOWNLIGHT LL1-3000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5124.8 lumens
Efficiency: N/A
Efficacy: 98.6 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

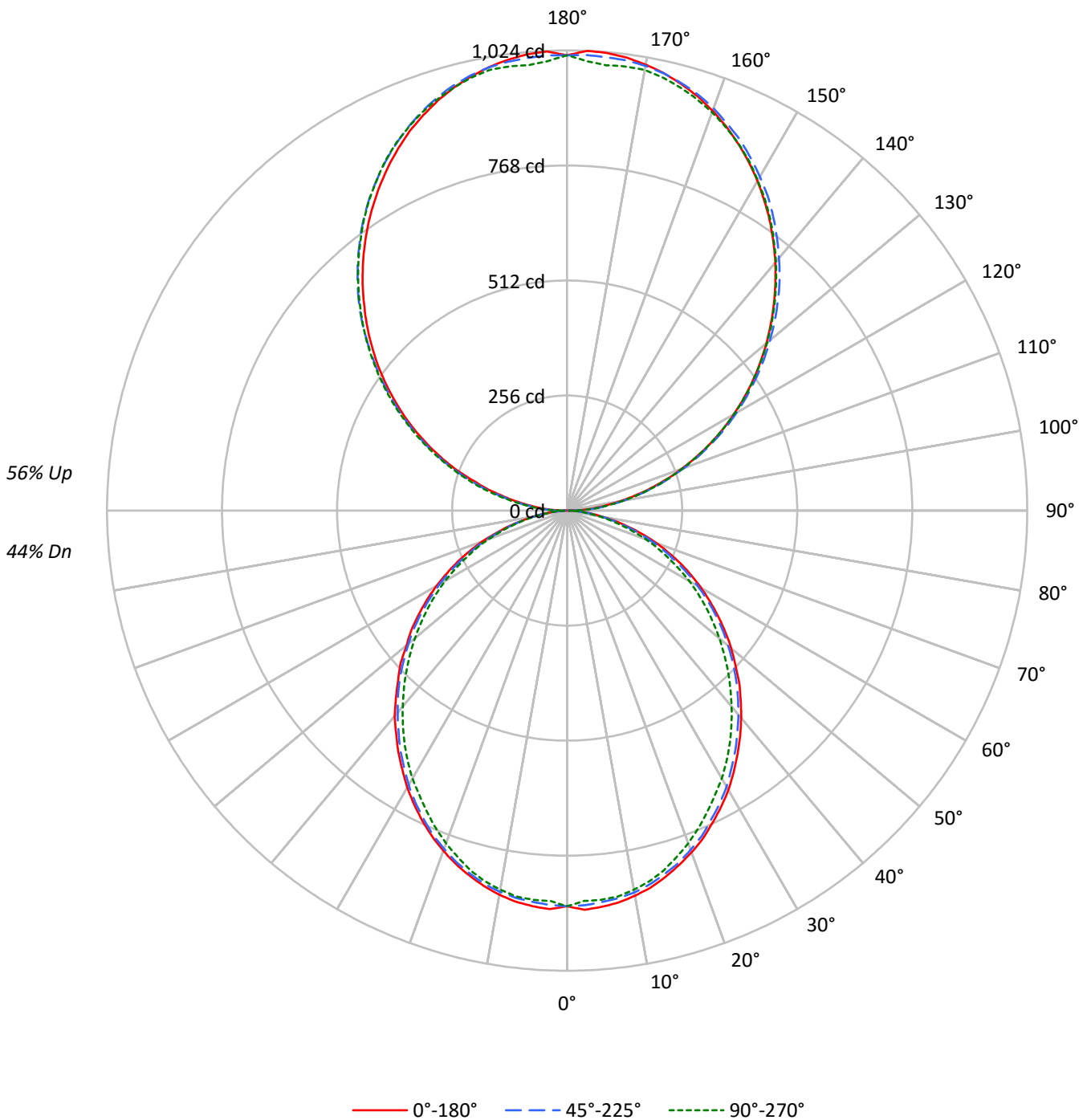
Input Watts (W): 52
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	13923	13923	13923
5°	13940	11533	13918
10°	13751	9848	13720
15°	13491	8472	13437
20°	13184	7289	13117
25°	12817	6291	12750
30°	12446	5468	12340
35°	11993	4731	11883
40°	11549	4069	11446
45°	11089	3482	10892
50°	10570	2954	10344
55°	9992	2473	9826
60°	9402	2028	9159
65°	8686	1592	8386
70°	7795	1197	7415
75°	6508	806	6071
80°	4851	469	4402
85°	3010	185	2532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	1.6
10°-20°	235.0	4.6
20°-30°	346.5	6.8
30°-40°	404.1	7.9
40°-50°	405.0	7.9
50°-60°	354.3	6.9
60°-70°	260.6	5.1
70°-80°	141.3	2.8
80°-90°	36.2	0.7
90°-100°	70.3	1.4
100°-110°	206.2	4.0
110°-120°	346.7	6.8
120°-130°	452.2	8.8
130°-140°	504.1	9.8
140°-150°	493.0	9.6
150°-160°	414.7	8.1
160°-170°	275.7	5.4
170°-180°	96.0	1.9
0°-30°	664.5	13.0
0°-40°	1068.6	20.9
0°-60°	1827.8	35.7
0°-90°	2266.0	44.2
90°-120°	623.2	12.2
90°-150°	2072.5	40.4
90°-180°	2859.0	55.8
0°-180°	5124.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	880	880	880	880	880	
5°	885	875	869	874	884	84
15°	844	837	829	836	841	238
25°	766	758	739	756	762	353
35°	661	652	631	648	655	414
45°	541	532	506	526	532	417
55°	410	402	378	395	403	367
65°	278	267	248	259	268	275
75°	143	136	124	127	133	152
85°	34	32	27	28	29	38
90°	1	3	5	4	1	8
95°	59	67	67	63	55	61
105°	193	202	199	192	182	204
115°	351	356	351	346	338	346
125°	504	513	506	502	493	451
135°	651	664	653	656	638	502
145°	786	799	789	790	773	492
155°	901	910	901	901	889	415
165°	982	984	974	979	974	277
175°	1022	1012	995	1011	1019	97
180°	1013	1013	1013	1013	1013	



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CATALOG NUMBER: S122-DIP-U1-1-30-X-X0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	880.3	880.3	880.3	880.3	880.3	880.3	880.3	880.3	880.3
2.5°	889.2	876.9	879.0	876.2	869.4	875.5	878.3	876.2	887.8
5°	885.1	872.8	874.9	871.5	869.4	871.5	874.2	871.5	883.7
7.5°	879.6	866.0	870.1	868.1	866.0	867.4	869.4	864.7	877.6
10°	870.1	856.5	862.6	858.5	856.5	857.8	861.3	854.4	868.1
12.5°	859.2	845.6	851.7	847.0	844.9	844.9	851.0	843.6	855.8
15°	844.2	833.3	837.4	832.7	829.3	831.3	836.1	830.6	840.8
17.5°	827.2	817.7	822.4	815.0	808.8	813.6	820.4	814.3	824.5
20°	809.5	798.6	803.4	793.2	787.7	791.8	800.7	795.9	805.4
22.5°	789.8	779.6	783.6	770.0	764.6	768.0	780.9	776.1	785.0
25°	765.9	757.8	758.4	744.8	738.7	742.8	756.4	753.7	761.9
27.5°	742.8	734.6	735.3	719.6	712.8	718.3	731.9	729.9	737.3
30°	717.6	710.1	709.4	693.8	688.3	691.7	705.3	705.3	711.5
32.5°	689.7	683.6	680.2	665.9	660.4	664.5	676.1	678.1	682.9
35°	661.1	657.0	652.2	638.6	631.1	636.6	647.5	650.2	655.0
37.5°	632.5	627.7	622.3	608.7	600.5	607.3	616.8	621.6	625.0
40°	602.5	599.1	593.0	579.4	569.2	576.0	586.9	592.3	597.1
42.5°	571.9	569.9	562.4	548.1	537.9	545.3	556.9	561.7	563.7
45°	541.3	538.5	531.7	516.8	505.9	514.0	526.3	531.0	531.7
47.5°	507.2	507.9	499.7	484.8	473.9	482.0	492.9	499.7	502.5
50°	476.6	477.3	467.7	452.8	441.9	448.0	460.9	467.7	466.4
52.5°	443.9	445.9	435.7	420.8	409.9	416.0	428.9	436.4	437.1
55°	409.9	413.3	402.4	387.4	377.9	384.0	394.9	403.7	403.1
57.5°	377.2	379.9	369.0	355.4	345.9	351.3	360.8	372.4	369.7
60°	344.5	347.2	335.6	322.0	313.9	316.6	327.5	337.0	335.6
62.5°	311.1	313.9	301.6	289.4	279.8	283.9	293.4	305.0	301.6
65°	277.8	279.8	266.9	256.0	247.8	251.9	258.7	271.0	268.2
67.5°	244.4	245.8	234.2	224.0	217.2	219.2	225.4	235.6	234.2
70°	211.1	212.4	201.5	192.0	185.9	187.9	192.7	202.2	200.8
72.5°	177.0	179.1	168.2	159.3	153.2	155.2	158.6	167.5	165.4
75°	143.0	144.3	136.2	129.4	123.9	124.6	127.3	134.1	133.4
77.5°	111.7	115.1	106.2	100.1	96.0	96.7	100.1	103.5	102.1
80°	81.0	85.1	79.0	74.2	70.8	70.1	72.8	75.6	73.5
82.5°	57.2	57.9	53.8	50.4	47.0	47.0	49.0	51.1	49.0
85°	34.0	35.4	32.0	29.3	27.2	26.6	27.9	30.0	28.6
87.5°	16.3	17.0	13.6	12.3	10.2	9.5	10.2	11.6	11.6
90°	1.4	3.4	3.4	4.1	4.8	4.8	4.1	4.1	0.7
92.5°	36.8	40.8	42.9	41.5	40.8	38.8	38.8	36.8	32.7
95°	58.6	64.7	67.4	66.7	66.7	64.0	63.3	61.3	55.1
97.5°	86.5	93.3	95.3	96.0	95.3	91.9	89.9	87.8	81.0
100°	118.5	125.3	127.3	127.3	126.6	123.2	120.5	117.8	110.3
102.5°	153.9	160.7	162.7	161.4	161.4	156.6	153.9	151.8	143.7
105°	193.4	200.2	201.5	199.5	198.8	194.0	192.0	189.3	181.8
107.5°	231.5	238.3	237.6	236.9	234.2	230.8	229.4	225.4	215.8
110°	271.0	279.8	276.4	275.1	272.3	268.9	267.6	266.2	258.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	310.5	320.0	315.9	314.5	311.1	307.1	307.1	306.4	298.9
115°	350.6	360.2	356.1	353.4	350.6	346.5	345.9	346.5	338.4
117.5°	389.4	400.3	395.6	392.2	389.4	384.7	385.4	386.7	377.9
120°	428.2	440.5	435.1	431.0	428.9	423.5	424.2	426.9	416.7
122.5°	466.4	478.6	473.9	469.8	467.7	461.6	463.0	464.3	454.8
125°	504.5	516.8	512.7	507.9	505.9	501.8	502.5	502.5	492.9
127.5°	541.9	554.2	551.5	546.0	543.3	537.9	540.6	538.5	530.4
130°	578.7	590.3	588.9	582.8	580.7	577.3	579.4	573.3	567.1
132.5°	614.8	626.4	627.0	620.2	617.5	614.1	618.2	611.4	603.2
135°	650.9	661.1	663.8	656.3	652.9	650.2	655.6	644.7	637.9
137.5°	685.6	693.8	699.9	691.0	688.3	683.6	690.4	679.5	673.3
140°	721.0	727.8	733.3	726.4	723.0	719.0	724.4	713.5	707.4
142.5°	753.7	761.2	766.6	759.8	755.7	752.3	757.8	746.2	740.7
145°	786.4	792.5	799.3	793.2	789.1	785.7	790.4	778.9	773.4
147.5°	817.0	822.4	830.6	823.8	819.7	817.0	820.4	808.8	804.1
150°	847.0	849.7	857.8	853.8	848.3	845.6	848.3	838.1	834.0
152.5°	874.9	876.9	884.4	879.6	876.9	872.1	875.5	865.3	862.6
155°	900.7	901.4	910.3	904.8	901.4	898.0	900.7	892.6	889.2
157.5°	925.2	925.2	931.4	928.7	923.2	921.8	923.9	915.0	914.4
160°	946.4	945.0	952.5	947.7	943.0	941.6	945.0	936.8	936.1
162.5°	966.1	963.4	970.2	964.1	960.0	958.6	963.4	955.9	956.6
165°	982.4	979.0	984.5	978.4	974.3	973.6	979.0	971.5	974.3
167.5°	996.7	991.3	996.1	989.9	986.5	985.8	992.0	985.2	989.2
170°	1007.6	1000.8	1004.9	996.7	995.4	994.0	1001.5	995.4	1002.2
172.5°	1016.5	1009.0	1010.4	1001.5	996.7	999.5	1007.6	1004.2	1011.7
175°	1021.9	1013.8	1012.4	1002.9	994.7	1000.8	1011.0	1010.4	1019.2
177.5°	1024.0	1016.5	1014.4	1003.5	1000.8	1002.2	1013.8	1014.4	1022.6
180°	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1

(END OF REPORT)