

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: P333794

Luminaire Tested: **S122DP-S1005D927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333794  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DP-S1005D927-4F0-1E-UDD-D  
Description: DEFINE 2 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1005 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3091.1 lumens  
Efficiency: N/A  
Efficacy: 75.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

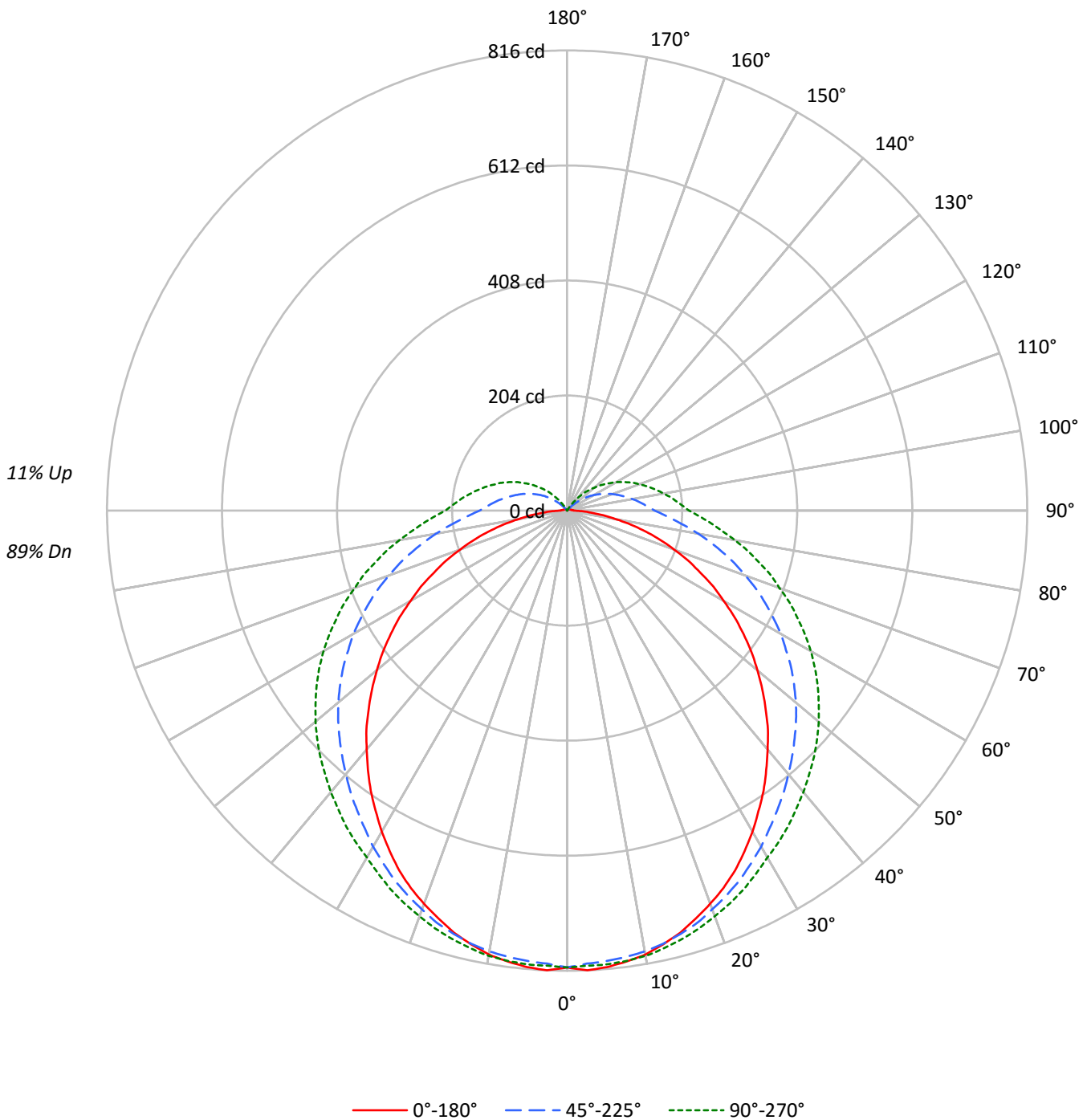
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	104	98	93	88	100	95	90	86	88	85	81	82	79	77	77	75	72	69
2	94	84	77	70	90	81	74	68	76	70	65	71	66	62	66	62	59	56
3	85	73	64	57	81	71	63	56	66	59	54	62	56	51	58	53	49	46
4	77	64	55	48	74	62	54	47	58	51	45	55	48	43	51	46	42	39
5	71	57	48	41	68	56	47	40	52	44	39	49	42	37	46	40	36	33
6	65	51	42	35	63	50	41	35	47	39	34	44	37	32	42	36	31	29
7	60	46	37	31	58	45	37	31	43	35	30	40	34	29	38	32	28	25
8	56	42	34	28	54	41	33	27	39	32	26	37	30	25	35	29	25	23
9	52	39	30	25	50	38	30	24	36	29	24	34	27	23	32	26	22	20
10	49	36	28	22	47	35	27	22	33	26	21	31	25	21	30	24	20	18

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

	0°	45°	90°
0°	13080	13080	13080
5°	13169	12997	13092
10°	13108	13013	13147
15°	12953	12991	13148
20°	12749	12931	13153
25°	12549	12884	13197
30°	12258	12827	13243
35°	11964	12798	13468
40°	11656	12867	13734
45°	11367	13029	14127
50°	11060	13300	14626
55°	10742	13650	15268
60°	10349	14141	16114
65°	9956	14800	17223
70°	9531	15852	18902
75°	9008	17798	21896
80°	8192	21943	28052
85°	7836	35235	47406



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	2.5
10°-20°	220.3	7.1
20°-30°	333.7	10.8
30°-40°	406.4	13.1
40°-50°	437.2	14.1
50°-60°	424.6	13.7
60°-70°	370.8	12.0
70°-80°	285.4	9.2
80°-90°	191.2	6.2
90°-100°	131.9	4.3
100°-110°	96.3	3.1
110°-120°	63.6	2.1
120°-130°	35.4	1.1
130°-140°	14.9	0.5
140°-150°	2.5	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	630.8	20.4
0°-40°	1037.2	33.6
0°-60°	1899.1	61.4
0°-90°	2746.5	88.9
90°-120°	291.8	9.4
90°-150°	344.6	11.1
90°-180°	345.0	11.2
0°-180°	3091.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	812	809	802	809	808	77
15°	775	777	777	788	787	218
25°	704	713	723	737	741	324
35°	607	627	649	675	683	379
45°	498	530	571	607	619	384
55°	382	424	485	527	542	341
65°	261	318	387	436	451	259
75°	144	210	285	336	351	153
85°	42	115	190	240	256	45
90°	12	80	155	202	216	8
95°	9	65	135	180	194	7
105°	6	40	101	142	155	7
115°	5	18	70	106	119	4
125°	2	2	40	72	82	2
135°	1	1	13	38	47	1
145°	0	0	0	7	13	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P333794

CATALOG NUMBER: S122DP-S1005D927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	810.1	810.1	810.1	810.1	810.1
2.5°	816.0	812.5	804.2	810.1	807.8
5°	812.5	808.9	801.9	808.9	807.8
7.5°	806.6	804.2	798.4	806.6	805.4
10°	799.5	797.2	793.7	803.1	801.9
12.5°	787.8	789.0	786.6	796.0	794.8
15°	774.9	777.2	777.2	787.8	786.6
17.5°	758.5	763.1	766.7	777.2	777.2
20°	742.0	747.9	752.6	765.5	765.5
22.5°	724.4	731.4	738.5	751.4	753.8
25°	704.4	712.7	723.2	737.3	740.8
27.5°	681.0	693.9	705.6	723.2	725.6
30°	657.5	672.7	688.0	706.8	710.3
32.5°	631.7	649.3	668.0	690.4	697.4
35°	607.0	627.0	649.3	675.1	683.3
37.5°	580.0	602.3	630.5	658.7	666.9
40°	553.0	578.8	610.5	641.0	651.6
42.5°	527.2	553.0	590.6	624.6	635.2
45°	497.8	529.5	570.6	607.0	618.7
47.5°	469.6	503.7	550.6	588.2	601.1
50°	440.3	476.7	529.5	569.4	582.3
52.5°	412.1	450.8	507.2	548.3	562.4
55°	381.6	423.8	484.9	527.2	542.4
57.5°	352.2	399.2	460.2	506.0	521.3
60°	320.5	371.0	437.9	482.5	499.0
62.5°	292.3	345.2	412.1	460.2	475.5
65°	260.6	318.2	387.4	435.6	450.8
67.5°	232.5	292.3	362.8	410.9	427.4
70°	201.9	263.0	335.8	386.3	400.4
72.5°	173.8	237.2	311.1	360.4	378.1
75°	144.4	210.2	285.3	335.8	351.0
77.5°	116.2	184.3	260.6	311.1	327.6
80°	88.1	159.7	236.0	285.3	301.7
82.5°	64.6	135.0	212.5	261.8	277.1
85°	42.3	115.1	190.2	239.5	255.9
87.5°	25.8	96.3	171.4	219.6	234.8
90°	11.7	79.8	155.0	201.9	216.0
92.5°	10.6	72.8	144.4	190.2	204.3
95°	9.4	64.6	135.0	179.6	193.7
97.5°	8.2	58.7	126.8	170.2	184.3
100°	8.2	51.7	117.4	160.8	173.8
102.5°	7.0	45.8	109.2	151.5	164.4
105°	5.9	39.9	101.0	142.1	155.0
107.5°	5.9	34.0	92.8	132.7	145.6
110°	4.7	28.2	85.7	123.3	136.2



TEST NUMBER: P333794

CATALOG NUMBER: S122DP-S1005D927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	4.7	23.5	77.5	115.1	128.0
115°	4.7	17.6	70.4	105.7	118.6
117.5°	3.5	12.9	62.2	97.4	109.2
120°	3.5	8.2	55.2	88.1	101.0
122.5°	3.5	4.7	48.1	79.8	90.4
125°	2.3	2.3	39.9	71.6	82.2
127.5°	2.3	1.2	32.9	62.2	72.8
130°	2.3	1.2	25.8	54.0	63.4
132.5°	2.3	1.2	18.8	45.8	55.2
135°	1.2	1.2	12.9	37.6	47.0
137.5°	1.2	1.2	7.0	29.4	37.6
140°	1.2	0.0	2.3	21.1	28.2
142.5°	1.2	0.0	0.0	14.1	20.0
145°	0.0	0.0	0.0	7.0	12.9
147.5°	0.0	0.0	0.0	1.2	4.7
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)