

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: P333804

Luminaire Tested: **SA2XXDP-C1005D935-4F0-1E-UDD-D**

Issue Date: 10/11/2019

Test Information

Test Method: LM-79-08
Report Number: P333804
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-14)
Test Lab: INNOVATIONS CENTER
Issue Date: 10/11/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDP-C1005D935-4F0-1E-UDD-D
Description: DEFINE 2 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 1005 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

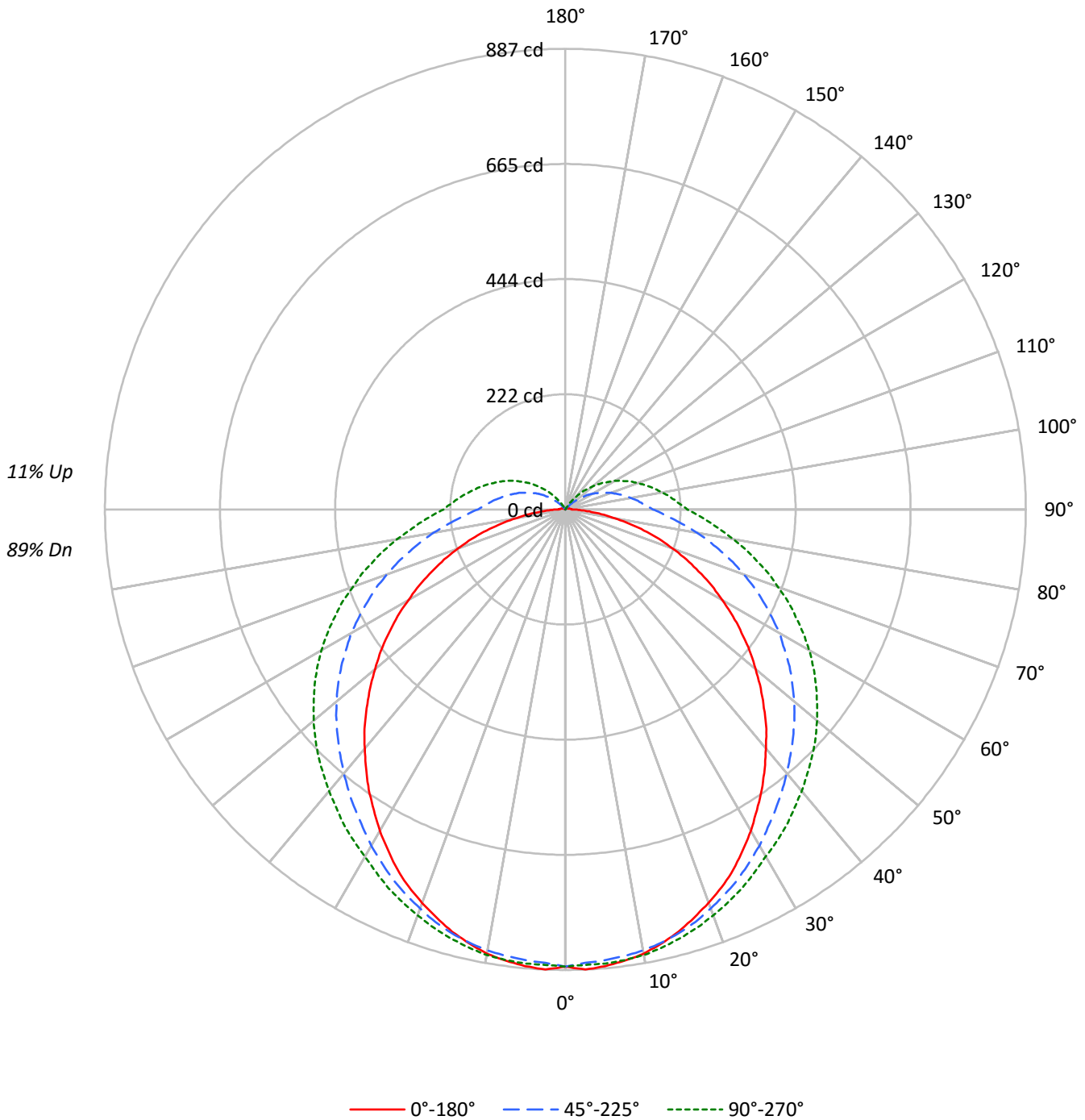
Lumens per Lamp: N/A
Luminaire Lumens: 3359.6 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (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				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°	14216	14216	14216
5°	14311	14126	14229
10°	14247	14142	14290
15°	14078	14121	14292
20°	13857	14055	14295
25°	13639	14004	14345
30°	13323	13942	14393
35°	13003	13910	14639
40°	12667	13987	14927
45°	12355	14161	15356
50°	12019	14456	15897
55°	11674	14835	16594
60°	11250	15371	17512
65°	10823	16088	18720
70°	10362	17231	20540
75°	9794	19345	23799
80°	8898	23849	30488
85°	8503	38292	51537



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	2.5
10°-20°	239.4	7.1
20°-30°	362.7	10.8
30°-40°	441.7	13.1
40°-50°	475.2	14.1
50°-60°	461.5	13.7
60°-70°	403.0	12.0
70°-80°	310.2	9.2
80°-90°	207.8	6.2
90°-100°	143.3	4.3
100°-110°	104.7	3.1
110°-120°	69.1	2.1
120°-130°	38.5	1.1
130°-140°	16.2	0.5
140°-150°	2.7	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	685.6	20.4
0°-40°	1127.3	33.6
0°-60°	2064.1	61.4
0°-90°	2985.1	88.9
90°-120°	317.1	9.4
90°-150°	374.5	11.1
90°-180°	375.0	11.2
0°-180°	3359.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	883	879	872	879	878	84
15°	842	845	845	856	855	237
25°	766	775	786	801	805	352
35°	660	681	706	734	743	412
45°	541	576	620	660	672	418
55°	415	461	527	573	590	371
65°	283	346	421	473	490	281
75°	157	228	310	365	382	166
85°	46	125	207	260	278	48
90°	13	87	168	220	235	9
95°	10	70	147	195	211	8
105°	6	43	110	154	168	7
115°	5	19	77	115	129	5
125°	3	3	43	78	89	3
135°	1	1	14	41	51	1
145°	0	0	0	8	14	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	880.5	880.5	880.5	880.5	880.5
2.5°	886.9	883.0	874.1	880.5	877.9
5°	883.0	879.2	871.6	879.2	877.9
7.5°	876.7	874.1	867.7	876.7	875.4
10°	869.0	866.5	862.6	872.8	871.6
12.5°	856.2	857.5	855.0	865.2	863.9
15°	842.2	844.8	844.8	856.2	855.0
17.5°	824.3	829.4	833.3	844.8	844.8
20°	806.5	812.9	818.0	832.0	832.0
22.5°	787.3	795.0	802.6	816.7	819.2
25°	765.6	774.6	786.1	801.4	805.2
27.5°	740.1	754.2	766.9	786.1	788.6
30°	714.6	731.2	747.8	768.2	772.0
32.5°	686.5	705.7	726.1	750.3	758.0
35°	659.7	681.4	705.7	733.7	742.7
37.5°	630.4	654.6	685.2	715.9	724.8
40°	601.0	629.1	663.6	696.7	708.2
42.5°	573.0	601.0	641.9	678.9	690.4
45°	541.1	575.5	620.2	659.7	672.5
47.5°	510.4	547.4	598.5	639.3	653.3
50°	478.5	518.1	575.5	618.9	632.9
52.5°	447.9	490.0	551.3	595.9	611.2
55°	414.7	460.7	527.0	573.0	589.5
57.5°	382.8	433.9	500.2	550.0	566.6
60°	348.4	403.2	476.0	524.5	542.3
62.5°	317.7	375.2	447.9	500.2	516.8
65°	283.3	345.8	421.1	473.4	490.0
67.5°	252.7	317.7	394.3	446.6	464.5
70°	219.5	285.8	365.0	419.8	435.1
72.5°	188.9	257.8	338.2	391.8	410.9
75°	157.0	228.4	310.1	365.0	381.5
77.5°	126.3	200.3	283.3	338.2	356.0
80°	95.7	173.5	256.5	310.1	327.9
82.5°	70.2	146.7	231.0	284.6	301.2
85°	45.9	125.1	206.7	260.3	278.2
87.5°	28.1	104.6	186.3	238.6	255.2
90°	12.8	86.8	168.4	219.5	234.8
92.5°	11.5	79.1	157.0	206.7	222.0
95°	10.2	70.2	146.7	195.2	210.6
97.5°	8.9	63.8	137.8	185.0	200.3
100°	8.9	56.1	127.6	174.8	188.9
102.5°	7.7	49.8	118.7	164.6	178.6
105°	6.4	43.4	109.7	154.4	168.4
107.5°	6.4	37.0	100.8	144.2	158.2
110°	5.1	30.6	93.2	134.0	148.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.1	25.5	84.2	125.1	139.1
115°	5.1	19.1	76.6	114.8	128.9
117.5°	3.8	14.0	67.6	105.9	118.7
120°	3.8	8.9	60.0	95.7	109.7
122.5°	3.8	5.1	52.3	86.8	98.3
125°	2.6	2.6	43.4	77.8	89.3
127.5°	2.6	1.3	35.7	67.6	79.1
130°	2.6	1.3	28.1	58.7	68.9
132.5°	2.6	1.3	20.4	49.8	60.0
135°	1.3	1.3	14.0	40.8	51.0
137.5°	1.3	1.3	7.7	31.9	40.8
140°	1.3	0.0	2.6	23.0	30.6
142.5°	1.3	0.0	0.0	15.3	21.7
145°	0.0	0.0	0.0	7.7	14.0
147.5°	0.0	0.0	0.0	1.3	5.1
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)