

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: P242265

Luminaire Tested: **S122DR-S485D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242265
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-S485D840-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1918.6 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

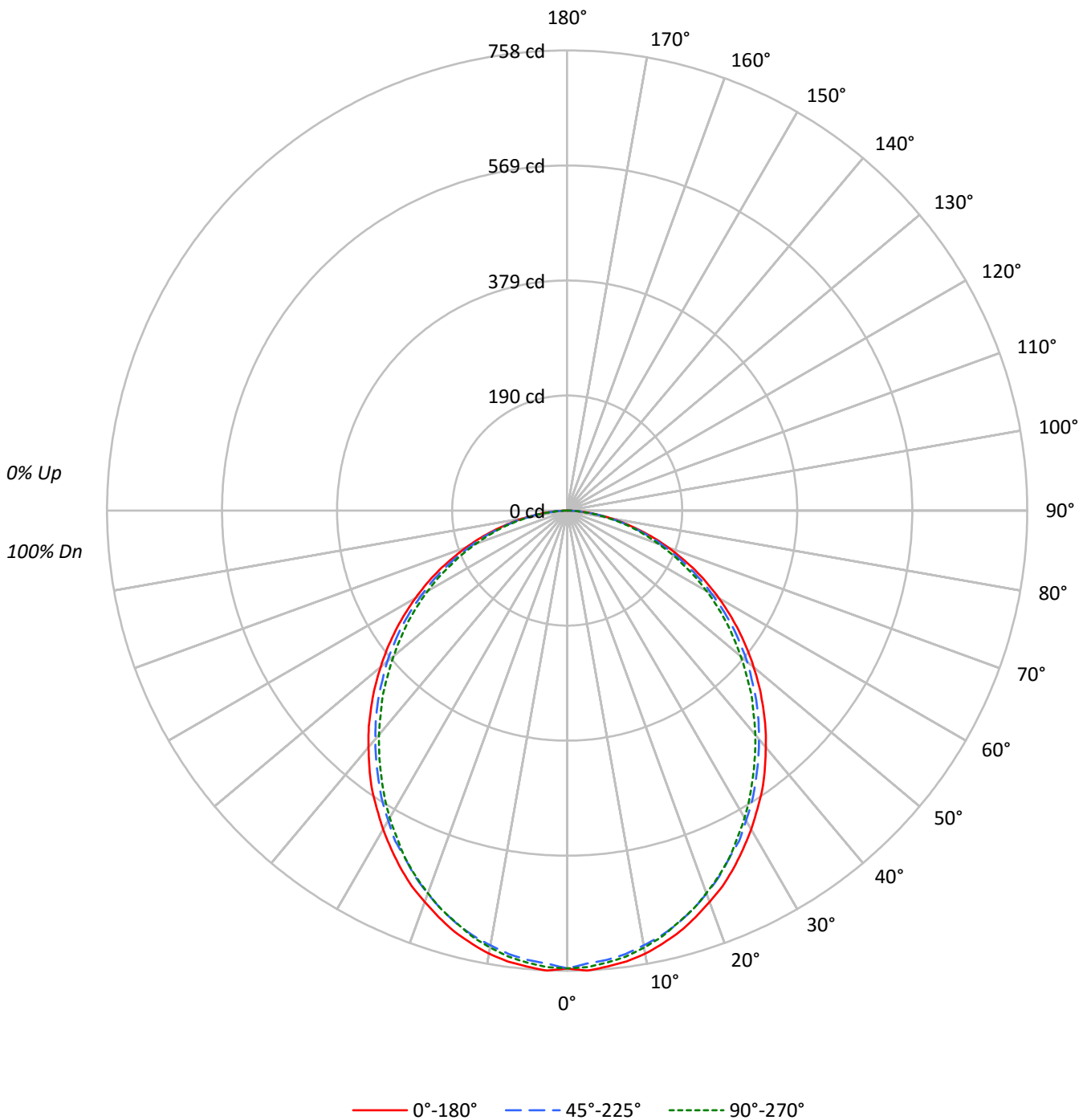
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14364	14364	14364
5°	14419	14210	14294
10°	14334	14067	14137
15°	14157	13885	13871
20°	13905	13611	13595
25°	13655	13274	13274
30°	13333	12966	12854
35°	13033	12596	12410
40°	12656	12224	11990
45°	12286	11855	11564
50°	11883	11474	11065
55°	11464	11029	10620
60°	10994	10495	10111
65°	10492	9970	9510
70°	9852	9328	8883
75°	8964	8589	8375
80°	7953	7711	7316
85°	6491	6185	5551



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	3.7
10°-20°	199.7	10.4
20°-30°	293.5	15.3
30°-40°	340.8	17.8
40°-50°	340.4	17.7
50°-60°	296.8	15.5
60°-70°	219.4	11.4
70°-80°	124.2	6.5
80°-90°	32.8	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	564.1	29.4
0°-40°	905.0	47.2
0°-60°	1542.2	80.4
0°-90°	1918.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1918.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	754	751	743	749	748	72
15°	718	714	704	707	703	202
25°	650	644	632	633	632	299
35°	560	553	542	537	534	350
45°	456	451	440	432	429	352
55°	345	341	332	323	320	309
65°	233	228	221	215	211	230
75°	122	120	117	112	114	130
85°	30	29	28	26	25	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.1	754.1	754.1	754.1	754.1
2.5°	758.5	754.8	746.9	754.1	752.7
5°	754.1	751.2	743.2	749.0	747.6
7.5°	749.0	744.7	736.7	742.5	741.1
10°	741.1	736.0	727.3	733.1	730.9
12.5°	730.2	725.8	717.1	720.8	719.3
15°	717.9	713.5	704.1	707.0	703.4
17.5°	702.6	698.3	688.9	692.5	688.9
20°	686.0	681.6	671.5	673.6	670.7
22.5°	669.3	662.8	653.3	653.3	651.9
25°	649.7	643.9	631.6	633.0	631.6
27.5°	627.9	622.9	613.4	611.3	607.6
30°	606.2	600.4	589.5	587.3	584.4
32.5°	583.0	578.6	567.0	562.7	559.8
35°	560.5	553.3	541.7	537.3	533.7
37.5°	535.1	528.6	517.0	511.9	508.3
40°	509.0	503.2	491.6	485.1	482.2
42.5°	483.6	477.8	466.2	459.0	454.6
45°	456.1	451.0	440.1	432.2	429.3
47.5°	429.3	424.2	412.6	404.6	400.3
50°	401.0	397.4	387.2	377.1	373.4
52.5°	373.4	368.4	358.9	351.0	345.9
55°	345.2	340.8	332.1	323.4	319.8
57.5°	316.9	313.2	303.8	295.1	292.2
60°	288.6	285.7	275.5	267.6	265.4
62.5°	261.0	256.0	248.7	241.5	238.6
65°	232.8	228.4	221.2	214.6	211.0
67.5°	203.8	200.1	193.6	188.5	185.6
70°	176.9	174.0	167.5	162.4	159.5
72.5°	149.4	146.5	142.8	137.8	135.6
75°	121.8	120.4	116.7	112.4	113.8
77.5°	97.2	94.3	92.8	90.6	88.5
80°	72.5	71.8	70.3	68.2	66.7
82.5°	49.3	49.3	48.6	45.7	45.7
85°	29.7	29.0	28.3	26.1	25.4
87.5°	13.1	11.6	10.2	8.0	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)