

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: P333821

Luminaire Tested: **S122DW-S485D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333821  
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: S122DW-S485D840-4F0-1E-UDD-F  
Description: DEFINE 2 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 485 LUMENS PER FOOT  
Light Source: 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 0.17' x L: 4' x H: 0')  
CIE Type: Direct

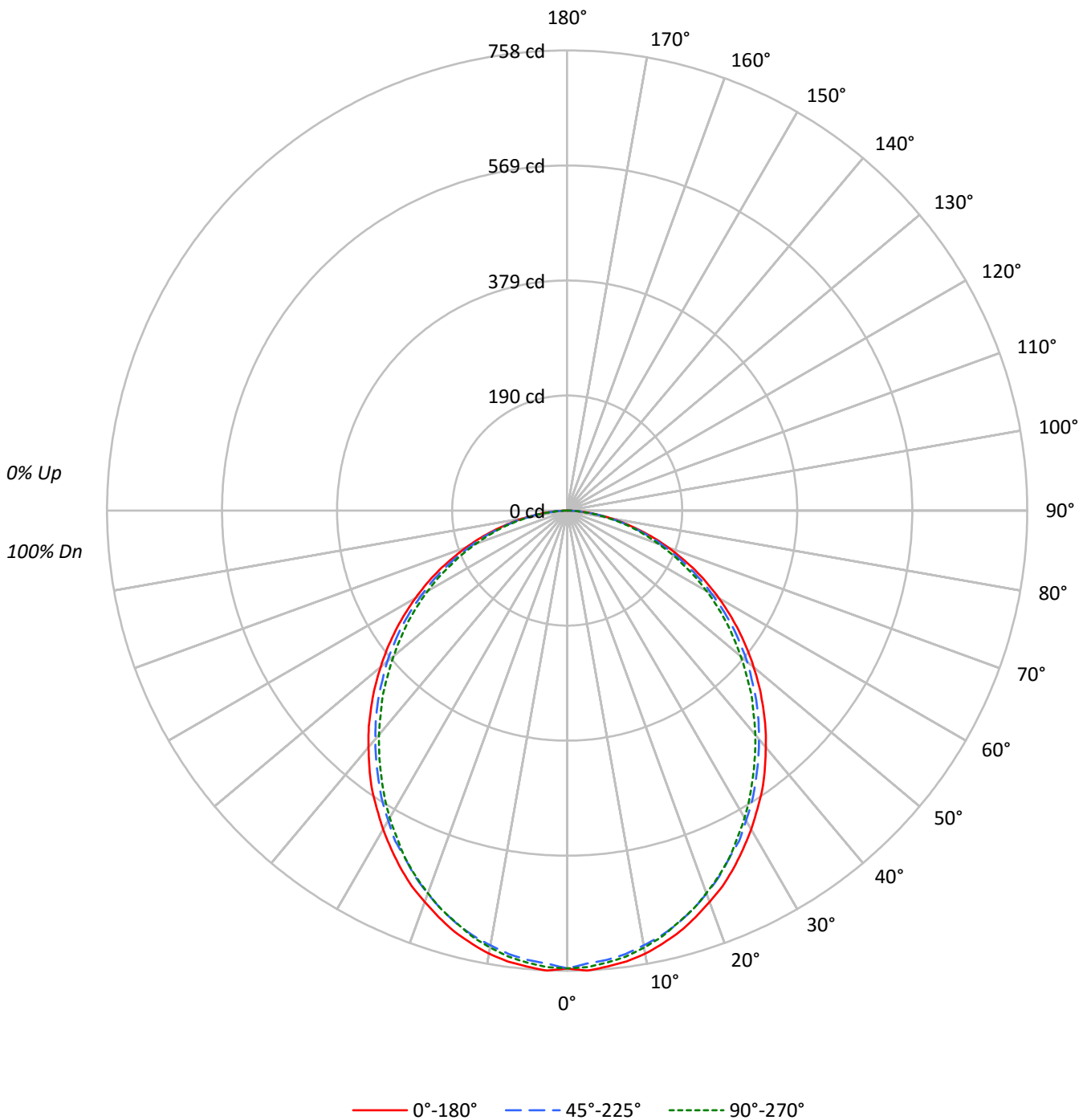
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	12176	12176	12176
5°	12222	12045	12117
10°	12150	11924	11983
15°	12000	11769	11758
20°	11787	11538	11524
25°	11574	11252	11252
30°	11302	10990	10895
35°	11048	10677	10519
40°	10728	10361	10163
45°	10414	10049	9802
50°	10073	9726	9379
55°	9717	9348	9002
60°	9319	8896	8570
65°	8894	8451	8061
70°	8351	7907	7530
75°	7598	7280	7099
80°	6741	6537	6202
85°	5502	5243	4705



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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)