

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: P242080

Luminaire Tested: **S121DR-S685D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-S685D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2178.8 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

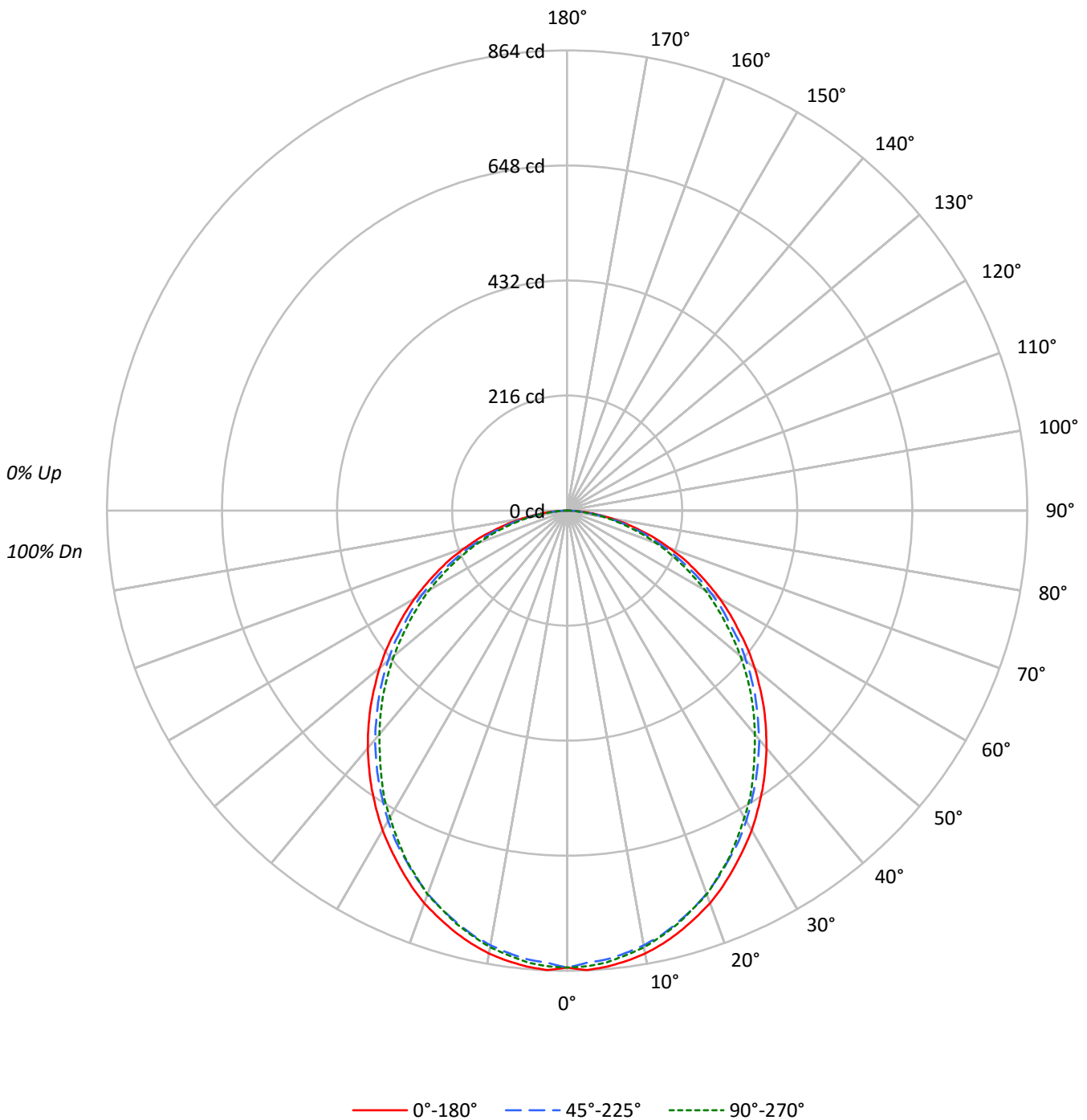
Input Watts (W): 26.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25419	25419	25419
5°	25564	25165	25329
10°	25408	24930	25050
15°	25101	24568	24641
20°	24730	24128	24178
25°	24216	23568	23516
30°	23717	23012	22766
35°	23124	22350	22007
40°	22523	21695	21204
45°	21873	20981	20449
50°	21181	20231	19572
55°	20338	19315	18617
60°	19621	18590	17742
65°	18663	17436	16553
70°	17569	16261	15368
75°	16142	14779	13783
80°	14333	12968	12029
85°	11865	9689	8601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.7
10°-20°	227.5	10.4
20°-30°	334.6	15.4
30°-40°	388.5	17.8
40°-50°	387.6	17.8
50°-60°	337.3	15.5
60°-70°	248.4	11.4
70°-80°	138.4	6.4
80°-90°	35.7	1.6
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°	642.9	29.5
0°-40°	1031.4	47.3
0°-60°	1756.3	80.6
0°-90°	2178.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2178.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	860	856	846	853	852	82
15°	818	812	801	806	803	231
25°	741	733	721	722	719	341
35°	639	631	618	612	608	400
45°	522	513	501	491	488	402
55°	394	389	374	367	360	353
65°	266	261	249	241	236	264
75°	141	137	129	124	120	150
85°	35	33	28	27	25	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	857.9	857.9	857.9	857.9	857.9
2.5°	863.5	858.7	850.0	857.1	856.3
5°	859.5	855.6	846.1	853.2	851.6
7.5°	853.2	848.4	838.1	844.5	842.1
10°	844.5	839.7	828.6	833.4	832.6
12.5°	832.6	827.0	816.7	820.7	818.3
15°	818.3	812.0	800.9	806.4	803.3
17.5°	801.7	794.6	784.3	787.4	784.3
20°	784.3	776.3	765.2	768.4	766.8
22.5°	763.7	756.5	743.9	745.4	742.3
25°	740.7	732.8	720.9	722.5	719.3
27.5°	716.9	709.8	698.7	696.3	692.4
30°	693.2	684.4	672.6	669.4	665.4
32.5°	666.2	658.3	644.8	641.7	639.3
35°	639.3	631.4	617.9	611.6	608.4
37.5°	610.8	602.9	589.4	582.3	577.5
40°	582.3	573.5	560.9	553.7	548.2
42.5°	552.2	544.2	530.0	522.8	518.9
45°	522.0	513.3	500.7	491.2	488.0
47.5°	490.4	482.4	469.8	459.5	456.3
50°	459.5	450.8	438.9	428.6	424.6
52.5°	427.8	419.9	408.8	398.5	392.1
55°	393.7	389.0	373.9	366.8	360.4
57.5°	362.8	357.3	345.4	333.5	329.5
60°	331.1	324.8	313.7	303.4	299.4
62.5°	297.9	293.1	282.0	272.5	267.0
65°	266.2	260.6	248.7	240.8	236.1
67.5°	236.9	229.7	217.9	209.9	206.0
70°	202.8	197.3	187.7	181.4	177.4
72.5°	173.5	167.2	158.4	152.1	148.1
75°	141.0	137.0	129.1	123.6	120.4
77.5°	112.5	106.9	101.4	97.4	95.1
80°	84.0	80.0	76.0	72.1	70.5
82.5°	58.6	55.5	51.5	49.1	46.7
85°	34.9	33.3	28.5	26.9	25.3
87.5°	16.6	14.3	9.5	8.7	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)