

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: P242281

Luminaire Tested: **S122DR-S675D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242281
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-S675D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2359.4 lumens
Efficiency: N/A
Efficacy: 89.7 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

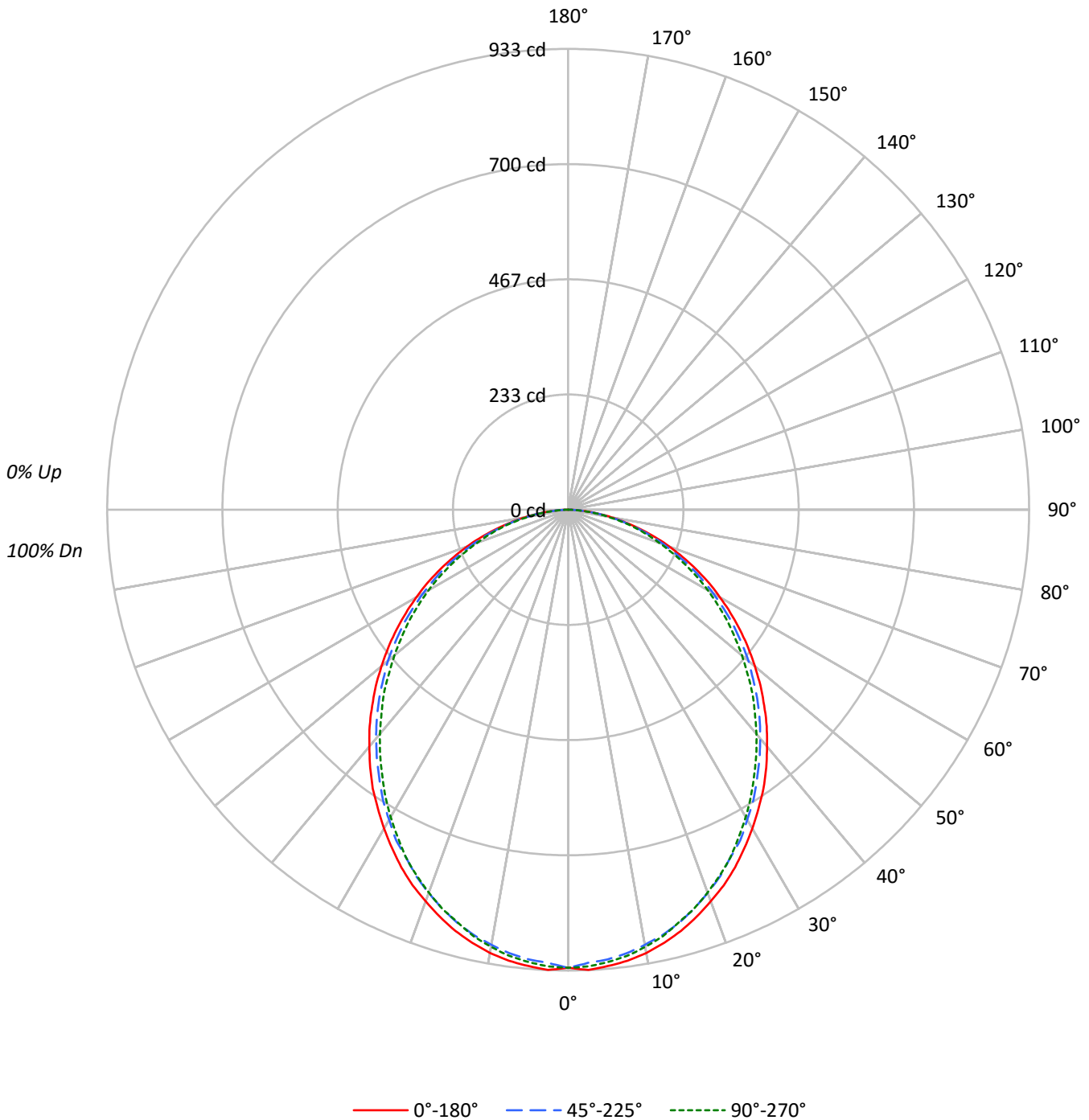
Input Watts (W): 26.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	17665	17665	17665
5°	17732	17476	17579
10°	17626	17299	17384
15°	17408	17075	17057
20°	17100	16737	16719
25°	16792	16324	16324
30°	16397	15946	15807
35°	16028	15489	15261
40°	15566	15033	14745
45°	15109	14581	14220
50°	14612	14111	13607
55°	14097	13562	13058
60°	13520	12911	12434
65°	12899	12259	11696
70°	12119	11473	10927
75°	11024	10568	10303
80°	9784	9488	8995
85°	7999	7605	6819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	3.7
10°-20°	245.6	10.4
20°-30°	360.9	15.3
30°-40°	419.2	17.8
40°-50°	418.7	17.7
50°-60°	365.0	15.5
60°-70°	269.8	11.4
70°-80°	152.7	6.5
80°-90°	40.3	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°	693.8	29.4
0°-40°	1112.9	47.2
0°-60°	1896.6	80.4
0°-90°	2359.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	927	924	914	921	919	88
15°	883	877	866	869	865	249
25°	799	792	777	778	777	368
35°	689	680	666	661	656	430
45°	561	555	541	532	528	433
55°	424	419	408	398	393	380
65°	286	281	272	264	260	283
75°	150	148	144	138	140	160
85°	37	36	35	32	31	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	927.4	927.4	927.4	927.4	927.4
2.5°	932.7	928.3	918.5	927.4	925.6
5°	927.4	923.8	914.0	921.1	919.4
7.5°	921.1	915.8	906.0	913.1	911.3
10°	911.3	905.1	894.4	901.5	898.8
12.5°	898.0	892.6	881.9	886.4	884.6
15°	882.8	877.4	865.9	869.4	865.0
17.5°	864.1	858.7	847.1	851.6	847.1
20°	843.6	838.2	825.7	828.4	824.8
22.5°	823.1	815.0	803.4	803.4	801.6
25°	799.0	791.8	776.7	778.5	776.7
27.5°	772.2	766.0	754.4	751.7	747.3
30°	745.5	738.3	725.0	722.3	718.7
32.5°	716.9	711.6	697.3	692.0	688.4
35°	689.3	680.4	666.1	660.8	656.3
37.5°	658.1	650.1	635.8	629.5	625.1
40°	626.0	618.8	604.6	596.6	593.0
42.5°	594.8	587.6	573.4	564.5	559.1
45°	560.9	554.6	541.3	531.5	527.9
47.5°	527.9	521.7	507.4	497.6	492.2
50°	493.1	488.7	476.2	463.7	459.2
52.5°	459.2	453.0	441.4	431.6	425.3
55°	424.5	419.1	408.4	397.7	393.2
57.5°	389.7	385.2	373.6	362.9	359.4
60°	354.9	351.3	338.9	329.0	326.4
62.5°	321.0	314.8	305.9	296.9	293.4
65°	286.2	280.9	272.0	263.9	259.5
67.5°	250.6	246.1	238.1	231.8	228.3
70°	217.6	214.0	206.0	199.7	196.2
72.5°	183.7	180.1	175.7	169.4	166.8
75°	149.8	148.0	143.6	138.2	140.0
77.5°	119.5	115.9	114.1	111.5	108.8
80°	89.2	88.3	86.5	83.8	82.0
82.5°	60.6	60.6	59.7	56.2	56.2
85°	36.6	35.7	34.8	32.1	31.2
87.5°	16.1	14.3	12.5	9.8	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)