

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: P242862

Luminaire Tested: **S125DR-S1090D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242862
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S1090D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3469.4 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

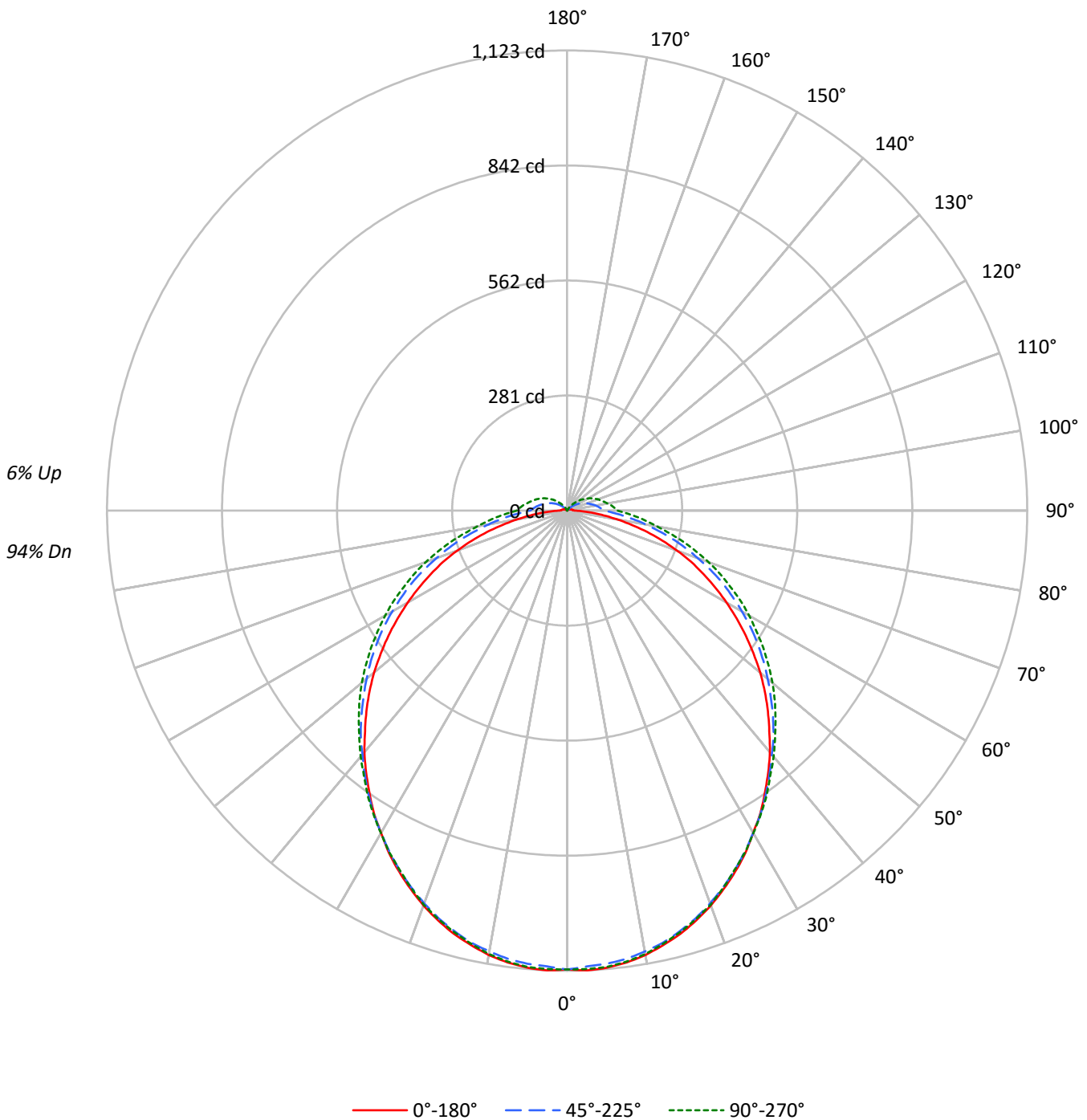
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7960	7960	7960
5°	7975	7807	7829
10°	7918	7660	7645
15°	7824	7488	7413
20°	7696	7275	7182
25°	7545	7049	6900
30°	7360	6800	6643
35°	7190	6571	6407
40°	7015	6331	6170
45°	6817	6124	5958
50°	6629	5899	5770
55°	6402	5687	5548
60°	6155	5443	5323
65°	5895	5188	5069
70°	5602	4843	4805
75°	5135	4506	4484
80°	4527	4097	4130
85°	3954	3803	3986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	3.1
10°-20°	300.9	8.7
20°-30°	447.4	12.9
30°-40°	529.8	15.3
40°-50°	547.8	15.8
50°-60°	504.6	14.5
60°-70°	407.9	11.8
70°-80°	272.9	7.9
80°-90°	141.1	4.1
90°-100°	79.5	2.3
100°-110°	58.6	1.7
110°-120°	39.2	1.1
120°-130°	22.2	0.6
130°-140°	9.7	0.3
140°-150°	1.9	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	854.2	24.6
0°-40°	1384.0	39.9
0°-60°	2436.4	70.2
0°-90°	3258.3	93.9
90°-120°	177.3	5.1
90°-150°	211.1	6.1
90°-180°	211.0	6.1
0°-180°	3469.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1120	1118	1110	1119	1118	106
15°	1069	1070	1063	1069	1065	301
25°	972	975	968	973	967	447
35°	841	849	845	849	849	526
45°	693	705	710	718	719	535
55°	532	550	568	580	584	476
65°	367	392	418	435	439	364
75°	202	231	266	288	293	214
85°	60	97	135	159	168	63
90°	18	53	90	115	123	12
95°	14	43	80	104	112	11
105°	10	27	60	82	90	10
115°	7	14	43	63	69	7
125°	4	3	25	43	48	4
135°	2	1	9	23	28	2
145°	1	0	0	6	10	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°	1119.9	1119.9	1119.9	1119.9	1119.9
2.5°	1123.2	1121.0	1113.4	1121.0	1119.9
5°	1119.9	1117.8	1110.1	1118.8	1117.8
7.5°	1112.3	1111.2	1103.5	1111.2	1110.1
10°	1101.3	1101.3	1092.5	1100.2	1099.1
12.5°	1085.9	1087.0	1080.4	1085.9	1082.6
15°	1069.4	1070.5	1062.9	1069.4	1065.0
17.5°	1048.6	1050.8	1043.1	1048.6	1045.3
20°	1025.5	1027.7	1020.0	1023.3	1023.3
22.5°	999.2	1003.6	994.8	999.2	995.9
25°	971.7	975.0	968.4	972.8	967.3
27.5°	942.1	946.5	938.8	942.1	939.9
30°	908.0	914.6	908.0	910.2	909.1
32.5°	877.3	882.8	878.4	880.6	879.5
35°	841.1	848.7	845.4	848.7	848.7
37.5°	805.9	812.5	811.4	815.8	814.7
40°	769.7	778.5	777.4	781.8	784.0
42.5°	730.2	742.2	745.5	751.0	751.0
45°	692.8	704.9	710.4	718.1	719.2
47.5°	654.4	665.4	674.2	685.1	687.3
50°	614.9	627.0	639.0	651.1	654.4
52.5°	573.1	588.5	603.9	617.1	619.3
55°	532.5	550.1	567.7	579.7	584.1
57.5°	490.8	511.7	531.4	544.6	547.9
60°	449.1	471.0	493.0	509.5	512.8
62.5°	408.5	430.4	454.6	473.2	477.6
65°	366.7	392.0	418.3	434.8	439.2
67.5°	328.3	352.5	378.8	398.6	404.1
70°	285.5	310.7	339.3	360.1	366.7
72.5°	243.8	270.1	301.9	325.0	329.4
75°	202.0	230.6	265.7	287.7	293.2
77.5°	161.4	194.3	227.3	251.4	255.8
80°	124.1	157.0	194.3	218.5	222.9
82.5°	90.0	125.2	163.6	186.7	195.4
85°	60.4	96.6	135.1	159.2	168.0
87.5°	38.4	73.6	110.9	136.2	143.8
90°	17.6	52.7	90.0	115.3	123.0
92.5°	15.4	47.2	85.6	109.8	117.5
95°	14.3	42.8	80.2	104.3	112.0
97.5°	13.2	39.5	75.8	98.8	106.5
100°	12.1	35.1	70.3	93.3	99.9
102.5°	11.0	31.8	65.9	87.8	94.4
105°	9.9	27.4	60.4	82.3	90.0
107.5°	8.8	24.2	56.0	78.0	84.5
110°	7.7	20.9	51.6	72.5	80.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7.7	17.6	47.2	67.0	74.7
115°	6.6	14.3	42.8	62.6	69.2
117.5°	5.5	11.0	38.4	57.1	64.8
120°	5.5	8.8	34.0	52.7	59.3
122.5°	4.4	5.5	29.6	47.2	53.8
125°	4.4	3.3	25.3	42.8	48.3
127.5°	3.3	2.2	20.9	37.3	43.9
130°	3.3	2.2	17.6	32.9	38.4
132.5°	2.2	2.2	13.2	28.5	32.9
135°	2.2	1.1	8.8	23.1	28.5
137.5°	2.2	1.1	5.5	18.7	23.1
140°	1.1	1.1	2.2	14.3	18.7
142.5°	1.1	0.0	0.0	9.9	14.3
145°	1.1	0.0	0.0	5.5	9.9
147.5°	0.0	0.0	0.0	2.2	4.4
150°	0.0	0.0	0.0	0.0	1.1
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)