

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: P242622

Luminaire Tested: **S124DR-S1195D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242622
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S1195D935-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4087.6 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

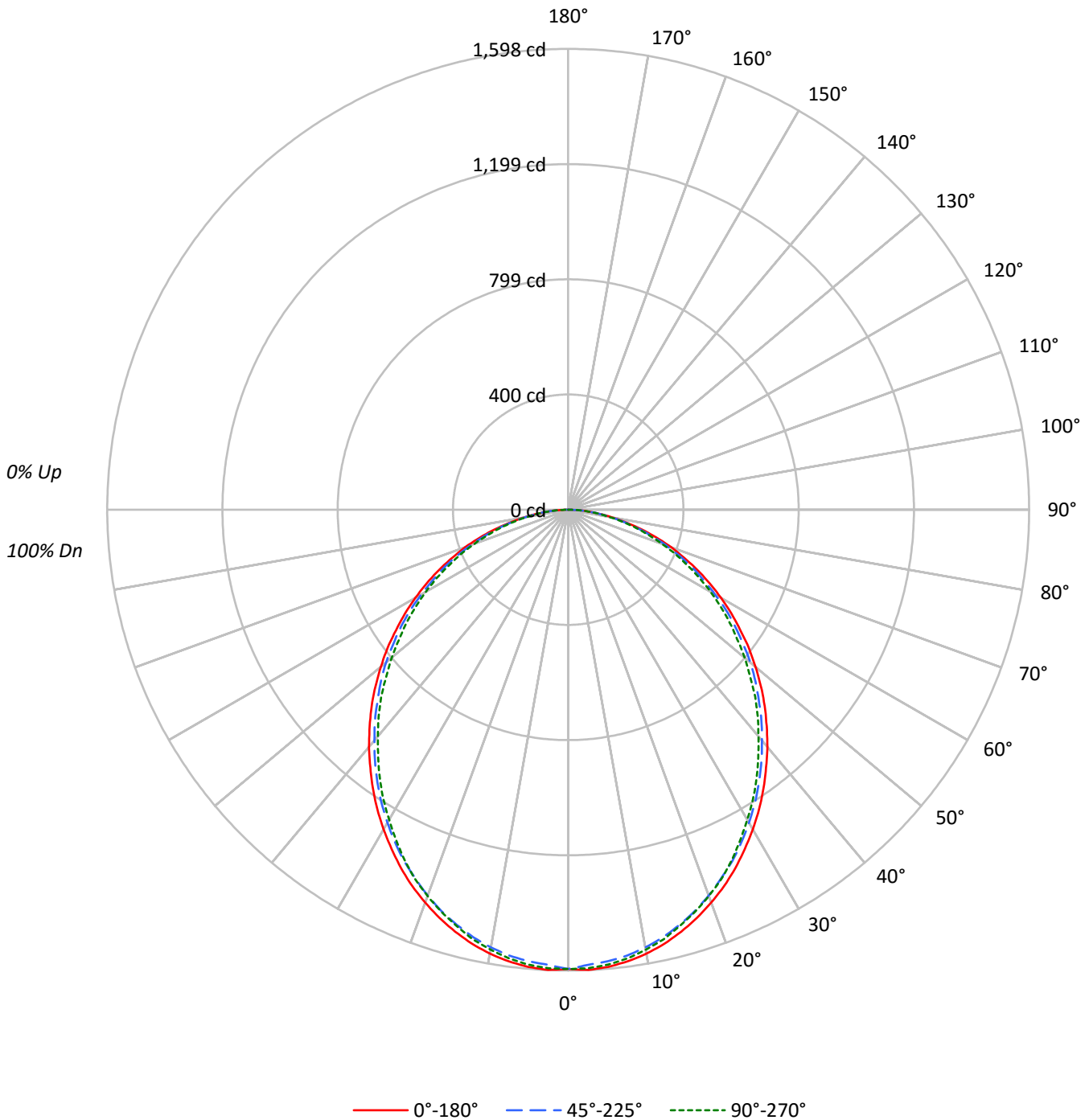
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	84	79	97	89	83	78	86	80	76		82	78	74		79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37		49	42	37		47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43	37	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	52	40	33	28	39	32	27		38	32	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14156	14156	14156
5°	14199	14028	14130
10°	14109	13914	13982
15°	13939	13716	13751
20°	13712	13471	13483
25°	13454	13192	13154
30°	13137	12862	12744
35°	12809	12518	12352
40°	12468	12127	11905
45°	12111	11742	11517
50°	11717	11399	11046
55°	11291	10955	10600
60°	10866	10459	10140
65°	10386	9984	9583
70°	9850	9354	8987
75°	9029	8589	8370
80°	8037	7709	7509
85°	7027	6772	6639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.1	3.7
10°-20°	422.9	10.3
20°-30°	622.4	15.2
30°-40°	723.5	17.7
40°-50°	723.4	17.7
50°-60°	632.7	15.5
60°-70°	469.7	11.5
70°-80°	266.5	6.5
80°-90°	76.3	1.9
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°	1195.4	29.2
0°-40°	1918.8	46.9
0°-60°	3275.0	80.1
0°-90°	4087.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1591	1586	1572	1586	1584	151
15°	1515	1510	1490	1498	1494	427
25°	1372	1363	1345	1346	1341	631
35°	1180	1171	1154	1145	1138	738
45°	963	954	934	920	916	743
55°	729	725	707	692	684	653
65°	494	488	475	462	456	489
75°	263	256	250	245	244	279
85°	69	69	66	66	65	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.5	1592.5	1592.5	1592.5	1592.5
2.5°	1597.6	1593.8	1579.8	1592.5	1591.3
5°	1591.3	1586.2	1572.1	1586.2	1583.6
7.5°	1579.8	1574.7	1559.4	1570.8	1569.6
10°	1563.2	1558.1	1541.5	1551.7	1549.1
12.5°	1541.5	1536.4	1518.5	1530.0	1526.2
15°	1514.7	1509.6	1490.5	1498.1	1494.3
17.5°	1484.1	1477.7	1459.8	1464.9	1462.4
20°	1449.6	1443.2	1424.1	1427.9	1425.4
22.5°	1412.6	1403.7	1384.5	1392.2	1387.1
25°	1371.8	1362.8	1345.0	1346.3	1341.2
27.5°	1325.8	1316.9	1300.3	1297.8	1291.4
30°	1279.9	1269.7	1253.1	1248.0	1241.6
32.5°	1231.4	1222.5	1204.6	1198.2	1191.9
35°	1180.4	1171.4	1153.6	1144.6	1138.3
37.5°	1126.8	1119.1	1100.0	1091.0	1082.1
40°	1074.5	1064.2	1045.1	1032.3	1026.0
42.5°	1018.3	1013.2	991.5	976.2	972.4
45°	963.4	954.5	934.1	920.0	916.2
47.5°	906.0	899.6	880.5	865.2	855.0
50°	847.3	842.2	824.3	806.5	798.8
52.5°	789.9	783.5	764.4	749.1	738.8
55°	728.6	724.8	706.9	691.6	684.0
57.5°	671.2	667.4	649.5	634.2	626.6
60°	611.2	604.9	588.3	576.8	570.4
62.5°	552.5	547.4	529.6	519.4	513.0
65°	493.8	487.5	474.7	461.9	455.6
67.5°	433.9	428.8	416.0	403.2	402.0
70°	379.0	370.1	359.9	349.6	345.8
72.5°	320.3	311.4	303.7	296.0	292.2
75°	262.9	256.5	250.1	245.0	243.7
77.5°	206.7	204.2	197.8	196.5	192.7
80°	157.0	153.1	150.6	148.0	146.7
82.5°	108.5	107.2	107.2	105.9	104.6
85°	68.9	68.9	66.4	66.4	65.1
87.5°	33.2	31.9	30.6	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)