

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242795

Luminaire Tested: S125DRP-S375D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S375D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

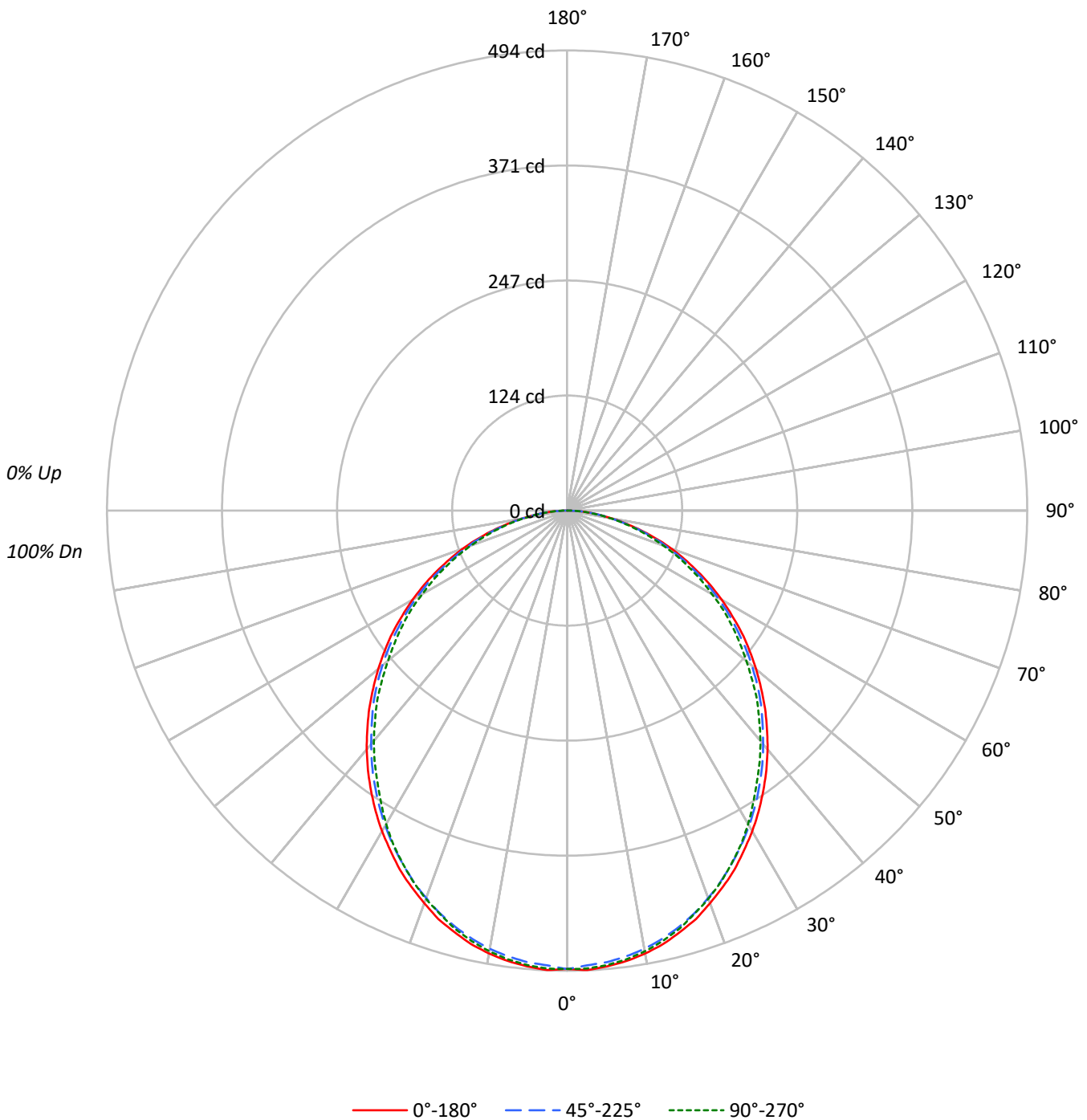
Lumens per Lamp: N/A
Luminaire Lumens: 1280.9 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
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: 24 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	94	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	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3498	3498	3498
5°	3505	3472	3494
10°	3484	3448	3467
15°	3447	3406	3421
20°	3392	3348	3354
25°	3334	3280	3276
30°	3262	3205	3189
35°	3185	3124	3081
40°	3106	3038	2995
45°	3021	2958	2900
50°	2928	2863	2776
55°	2836	2755	2678
60°	2728	2645	2552
65°	2600	2514	2428
70°	2475	2363	2282
75°	2257	2180	2106
80°	2010	1977	1928
85°	1745	1778	1680

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3021 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	3.6
10°-20°	131.2	10.2
20°-30°	193.7	15.1
30°-40°	225.9	17.6
40°-50°	226.9	17.7
50°-60°	199.2	15.6
60°-70°	148.4	11.6
70°-80°	84.8	6.6
80°-90°	24.5	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°	371.3	29.0
0°-40°	597.2	46.6
0°-60°	1023.3	79.9
0°-90°	1280.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1280.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	491	491	487	490	490	47
15°	468	467	463	465	465	132
25°	425	423	418	419	418	196
35°	367	366	360	358	355	230
45°	301	299	294	290	288	232
55°	229	228	222	219	216	204
65°	155	154	150	146	144	153
75°	82	81	79	78	77	87
85°	21	22	22	21	21	25
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	492.1	492.1	492.1	492.1	492.1
2.5°	493.7	492.5	488.6	492.5	492.1
5°	491.3	490.6	486.7	490.2	489.8
7.5°	487.8	487.1	482.8	486.3	485.9
10°	482.8	482.0	477.7	480.8	480.4
12.5°	476.6	475.0	471.1	473.4	473.4
15°	468.4	467.2	462.9	464.9	464.9
17.5°	459.8	457.9	453.6	455.9	454.0
20°	448.5	447.7	442.7	445.4	443.5
22.5°	437.2	435.7	431.0	432.6	431.4
25°	425.2	423.2	418.2	418.9	417.8
27.5°	411.1	410.0	404.9	405.3	404.1
30°	397.5	396.3	390.5	389.7	388.6
32.5°	382.7	380.8	375.7	374.2	371.8
35°	367.1	365.6	360.1	358.2	355.1
37.5°	351.2	349.2	344.2	341.5	339.5
40°	334.8	332.9	327.4	323.9	322.8
42.5°	317.3	315.8	310.3	307.2	305.2
45°	300.6	299.0	294.3	289.7	288.5
47.5°	282.3	282.7	276.8	272.1	269.4
50°	264.8	263.6	258.9	253.9	251.1
52.5°	246.8	246.1	241.0	236.7	233.6
55°	228.9	227.8	222.3	218.8	216.1
57.5°	209.9	209.5	204.8	200.1	199.0
60°	191.9	190.4	186.1	182.2	179.5
62.5°	173.3	172.1	168.6	164.3	162.4
65°	154.6	153.8	149.5	146.0	144.4
67.5°	136.3	134.7	131.6	128.5	127.7
70°	119.1	117.2	113.7	111.4	109.8
72.5°	100.5	99.3	97.3	94.6	93.1
75°	82.2	81.4	79.4	78.3	76.7
77.5°	65.0	64.6	63.5	62.7	61.5
80°	49.1	49.1	48.3	47.9	47.1
82.5°	35.0	34.3	34.3	33.5	33.5
85°	21.4	21.8	21.8	21.4	20.6
87.5°	10.5	10.5	10.1	10.1	9.3
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.70	17.32	16.07	17.63	17.95	15.37	16.99	15.74	17.30	17.62
	3H	17.47	18.93	17.85	19.26	19.62	17.10	18.57	17.48	18.89	19.25
	4H	18.13	19.50	18.53	19.85	20.23	17.75	19.13	18.15	19.48	19.85
	6H	18.60	19.88	19.01	20.24	20.64	18.24	19.51	18.65	19.88	20.27
	8H	18.76	19.98	19.18	20.37	20.77	18.40	19.62	18.82	20.01	20.40
	12H	18.87	20.03	19.30	20.42	20.84	18.51	19.68	18.94	20.06	20.49
4H	2H	16.28	17.66	16.68	18.00	18.38	16.02	17.40	16.42	17.74	18.12
	3H	18.27	19.43	18.68	19.83	20.23	17.97	19.13	18.38	19.52	19.92
	4H	19.06	20.10	19.49	20.52	20.95	18.75	19.79	19.18	20.20	20.64
	6H	19.67	20.58	20.12	21.02	21.48	19.36	20.27	19.81	20.71	21.17
	8H	19.87	20.73	20.33	21.17	21.64	19.57	20.42	20.03	20.87	21.33
	12H	20.03	20.79	20.51	21.27	21.74	19.72	20.49	20.20	20.97	21.44
8H	4H	19.35	20.20	19.81	20.64	21.11	19.07	19.92	19.53	20.37	20.83
	6H	20.08	20.79	20.57	21.28	21.75	19.81	20.52	20.30	21.01	21.48
	8H	20.36	20.99	20.87	21.50	21.99	20.09	20.73	20.60	21.24	21.72
	12H	20.59	21.15	21.09	21.64	22.20	20.33	20.89	20.83	21.38	21.94
12H	4H	19.38	20.14	19.86	20.62	21.09	19.11	19.87	19.59	20.35	20.82
	6H	20.13	20.77	20.64	21.27	21.76	19.87	20.51	20.38	21.02	21.50
	8H	20.47	21.03	20.97	21.52	22.08	20.21	20.78	20.72	21.27	21.83