

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: BALLABS TEST NO. 14306.0

Luminaire Tested: **S1BDR-1T5-STG4D-UMA17-S41-SI-S41**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 14306.0
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S1BDR-1T5-STG4D-UMA17-S41-SI-S41
Description: 1/28W T5 LAMP 4'LINEAR FLUOR RECESSED LUMINAIRE
CTR DIFFUSER w/SEMI-SPEC SIDES & .25"D 1"OC WHITE BLADES
MICROPRISM OVERLAY (PRISM DOWN) UNIVERSAL #B228PUNV-C
Light Source: -
FP28T5/835
Ballast/Driver: -

Summary

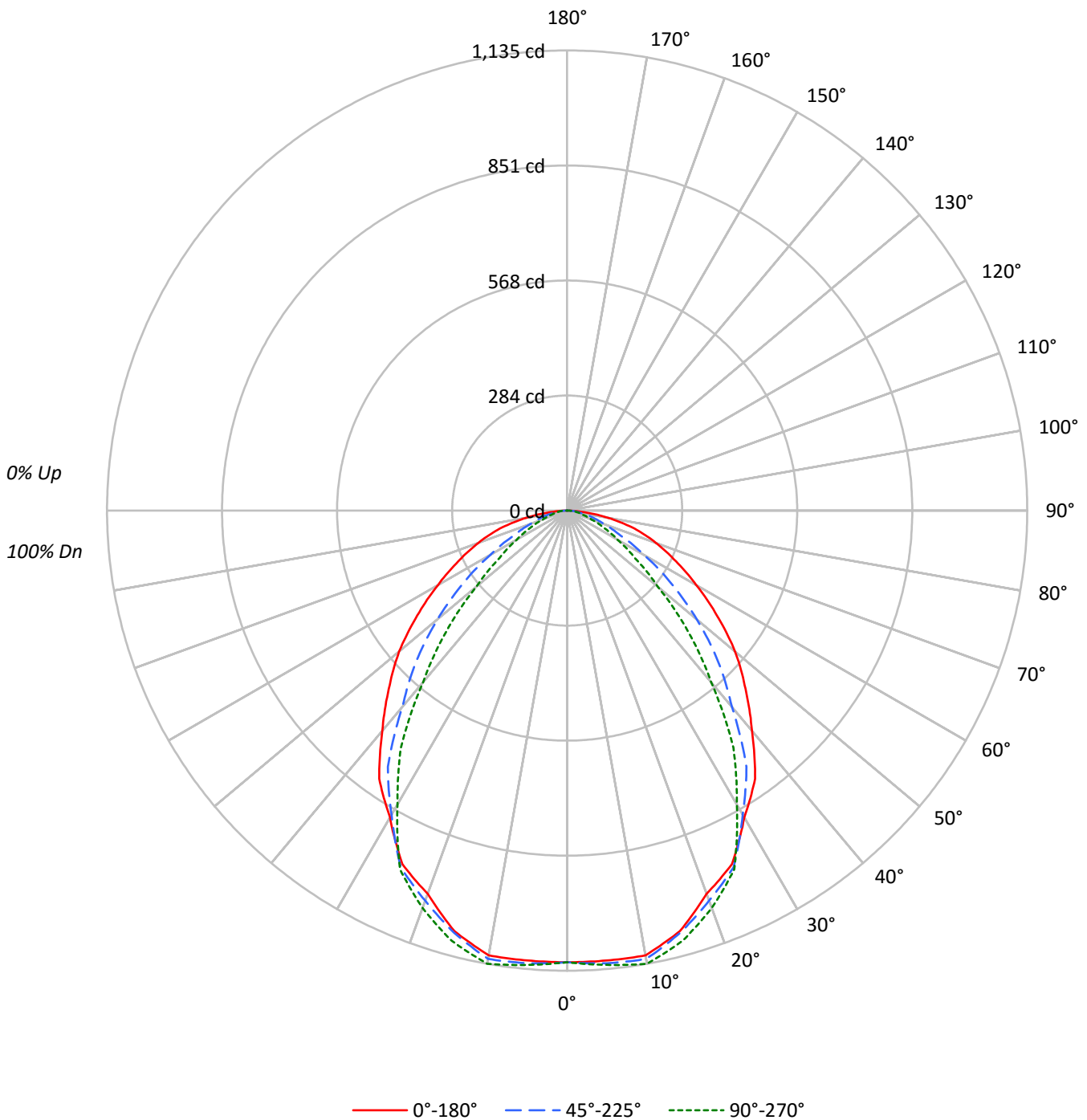
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2300.5 lumens
Efficiency: 79.3%
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.14 / 1.19
Luminous Opening: Rectangular (W 0.4' x L: 4.44' x H: 0')
CIE Type: Direct

Input Watts (W): 32
Input Voltage (V): NR
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: 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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	94	94	94	94	92	92	92	92	88	88	88	84	84	84	81	81	81	79																			
1	88	84	81	79	86	83	80	78	79	77	75	76	74	73	73	72	71	69																			
2	81	75	70	66	79	74	69	66	71	67	64	68	65	63	66	64	61	60																			
3	75	67	61	57	73	66	61	56	64	59	55	62	58	55	60	56	54	52																			
4	69	60	54	49	67	59	54	49	57	52	48	56	51	48	54	50	47	46																			
5	64	55	48	43	62	54	48	43	52	47	43	51	46	42	49	45	42	40																			
6	59	50	43	39	58	49	43	38	48	42	38	46	42	38	45	41	38	36																			
7	55	46	39	35	54	45	39	35	44	38	34	43	38	34	42	37	34	32																			
8	52	42	36	31	51	41	35	31	40	35	31	39	34	31	38	34	31	29																			
9	49	39	33	28	48	38	32	28	37	32	28	37	32	28	36	31	28	27																			
10	46	36	30	26	45	35	30	26	35	30	26	34	29	26	33	29	26	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6823	6823	6823
5°	6849	6892	6917
10°	6928	6984	7059
15°	6810	6835	6969
20°	6557	6674	6798
25°	6501	6562	6596
30°	6181	6125	5919
35°	6041	5765	5346
40°	5669	5053	4421
45°	5388	4565	3655
50°	5155	3973	2782
55°	4816	3342	2178
60°	4508	2695	1764
65°	4290	2101	1449
70°	4172	1719	1146
75°	4070	1515	970
80°	3598	1234	952
85°	2460	1195	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	107.0	4.7	3.7
10°-20°	304.7	13.2	10.5
20°-30°	440.5	19.1	15.2
30°-40°	473.4	20.6	16.3
40°-50°	405.8	17.6	14.0
50°-60°	289.2	12.6	10.0
60°-70°	173.8	7.6	6.0
70°-80°	83.5	3.6	2.9
80°-90°	22.6	1.0	0.8
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	852.2	37.0	29.4
0°-40°	1325.6	57.6	45.7
0°-60°	2020.7	87.8	69.7
0°-90°	2300.5	100.0	79.3
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	2300.5	100.0	79.3

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1114	1114	1114	1114	1114	
5°	1114	1116	1121	1126	1125	106
15°	1074	1079	1078	1093	1099	301
25°	962	966	971	971	976	439
35°	808	810	771	726	715	501
45°	622	603	527	457	422	481
55°	451	406	313	232	204	405
65°	296	230	145	118	100	295
75°	172	89	64	49	41	179
85°	35	19	17	17	17	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1114	1114	1114	1114	1114
5°	1114	1116	1121	1126	1125
10°	1114	1117	1123	1131	1135
15°	1074	1079	1078	1093	1099
20°	1006	1011	1024	1035	1043
25°	962	966	971	971	976
30°	874	877	866	842	837
35°	808	810	771	726	715
40°	709	697	632	576	553
45°	622	603	527	457	422
50°	541	504	417	331	292
55°	451	406	313	232	204
60°	368	315	220	163	144
65°	296	230	145	118	100
70°	233	153	96	78	64
75°	172	89	64	49	41
80°	102	44	35	30	27
85°	35	19	17	17	17
90°	0	0	0	0	0

(END OF REPORT)