



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DS-L10-835-DIM-UNV-OW-OF-SG\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20310.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 10-MAR-2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC -CARTHAGE, MO

[LUMINAIRE] GEN7 V13 LED 4"SHORT HEATSINK 4"SQ CAST HOUSING DOWLIGHT

[MORE] WHITE MIXING CHAMBER & 4"SEMI-SPEC TRIM w/FROST FILM

[MORE] ADVANCE #XI025C070V054DSM1

[LUMCAT] 4DS-L10-835-DIM-UNV-OW-OF-SG

[LAMPCAT] BXRE-35E2000

[\_SEARCH\_SOURCETYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Classroom, Office, Downlight

[\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	786
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	12
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.84
Spacing Criterion (90-270)	0.82
Spacing Criterion (Diagonal)	0.86
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8542	11047	8599
55	1755	2317	1545
65	0	0	0
75	0	0	0
85	0	0	0

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 4DS-L10-835-DIM-UNV-OW-OF-SG\_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0</b>	1010.215	1010.215	1010.215	1010.215	1010.215
<b>5</b>	981.566	977.829	972.431	972.431	967.448
<b>10</b>	897.277	886.066	874.025	873.610	872.780
<b>15</b>	799.702	776.035	747.800	758.181	782.678
<b>20</b>	700.466	660.605	631.125	651.471	681.366
<b>25</b>	575.071	548.082	522.754	533.135	567.182
<b>30</b>	391.962	404.418	421.857	408.155	396.945
<b>35</b>	218.818	251.620	310.580	252.450	206.361
<b>40</b>	105.049	126.225	180.203	129.132	108.371
<b>45</b>	62.282	63.113	80.551	59.791	62.697
<b>50</b>	34.878	33.632	31.556	31.971	31.556
<b>55</b>	10.380	12.872	13.702	12.456	9.135
<b>60</b>	0.415	1.246	4.152	1.246	0.000
<b>65</b>	0.000	0.000	0.000	0.000	0.000
<b>70</b>	0.000	0.000	0.000	0.000	0.000
<b>75</b>	0.000	0.000	0.000	0.000	0.000
<b>80</b>	0.000	0.000	0.000	0.000	0.000
<b>85</b>	0.000	0.000	0.000	0.000	0.000
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 4DS-L10-835-DIM-UNV-OW-OF-SG\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	305.40	N.A.	38.90
0-30	551.84	N.A.	70.20
0-40	715.09	N.A.	91.00
0-60	785.48	N.A.	99.90
0-80	785.90	N.A.	100.00
0-90	785.90	N.A.	100.00
10-90	695.85	N.A.	88.50
20-40	409.70	N.A.	52.10
20-50	467.13	N.A.	59.40
40-70	70.80	N.A.	9.00
60-80	0.42	N.A.	0.10
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	785.90	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	90.05
10-20	215.35
20-30	246.45
30-40	163.25
40-50	57.43
50-60	12.95
60-70	0.42
70-80	0.00
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 4DS-L10-835-DIM-UNV-OW-OF-SG\_.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

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
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81
4	97	90	84	80	95	89	83	80	86	82	79	84	81	78	83	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73	80	75	72	78	74	72	70
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	65
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61
8	79	70	64	60	78	69	64	60	68	63	59	67	62	59	66	62	59	57
9	76	66	60	56	74	65	60	56	64	59	56	64	59	56	63	58	55	54
10	72	62	57	53	71	62	56	53	61	56	52	60	56	52	60	55	52	51

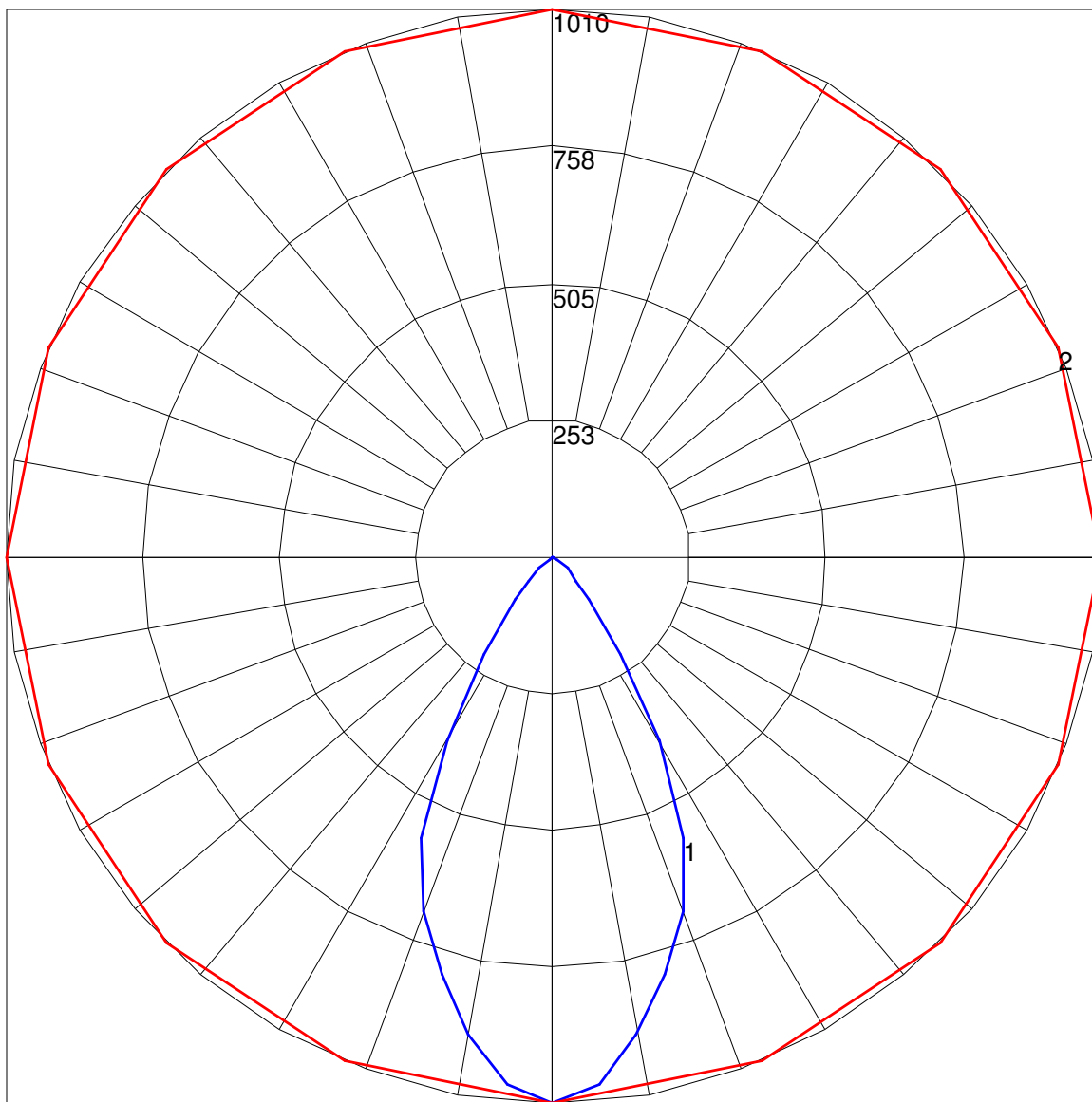
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 4DS-L10-835-DIM-UNV-OW-OF-SG\_.IES**

**UGR TABLE - CORRECTED**

Reflectances											
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor Cavity	20	20	20	20	20	20	20	20	20	20	
Room Size											
		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	3.0	4.0	3.4	4.3	4.6	2.7	3.7	3.0	4.0	4.3
	3H	2.8	3.7	3.2	4.0	4.4	2.5	3.4	2.9	3.7	4.1
	4H	2.7	3.5	3.1	3.9	4.3	2.4	3.2	2.8	3.5	3.9
	6H	2.6	3.4	3.0	3.7	4.1	2.3	3.0	2.7	3.4	3.8
	8H	2.6	3.2	3.0	3.6	4.1	2.2	2.9	2.7	3.3	3.7
	12H	2.5	3.2	2.9	3.5	4.0	2.2	2.8	2.6	3.2	3.6
4H	2H	2.7	3.5	3.1	3.9	4.3	2.4	3.2	2.8	3.5	3.9
	3H	2.5	3.2	2.9	3.6	4.0	2.2	2.8	2.6	3.2	3.6
	4H	2.4	3.0	2.8	3.4	3.9	2.1	2.6	2.5	3.1	3.5
	6H	2.3	2.8	2.8	3.2	3.7	2.0	2.4	2.4	2.9	3.4
	8H	2.2	2.7	2.7	3.1	3.6	1.9	2.3	2.4	2.8	3.3
	12H	2.1	2.5	2.6	3.0	3.5	1.8	2.2	2.3	2.7	3.2
8H	4H	2.2	2.7	2.7	3.1	3.6	1.9	2.3	2.4	2.8	3.3
	6H	2.1	2.5	2.6	3.0	3.4	1.7	2.1	2.2	2.6	3.1
	8H	2.0	2.3	2.5	2.9	3.4	1.7	2.0	2.2	2.5	3.0
	12H	2.0	2.2	2.5	2.7	3.3	1.6	1.9	2.1	2.4	3.0
12H	4H	2.1	2.5	2.6	3.0	3.5	1.8	2.2	2.3	2.7	3.2
	6H	2.0	2.3	2.5	2.8	3.4	1.7	2.0	2.2	2.5	3.0
	8H	2.0	2.2	2.5	2.7	3.3	1.6	1.9	2.1	2.4	3.0

Maximum UGR = 4.6

POLAR GRAPH



Maximum Candela = 1010.215 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)