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## Indoor Distribution Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-10-2014

**Prepared For**  
**Beghelli USA**  
3810 Executive Way  
Miramar, FL 33025  
United States

**Catalog Number**  
**CH-ESM**  
Order Number  
13558293  
Test Number  
13558293.01

Test Date  
2020-10-23

Prepared By

Javier Caban, Technician

Approved By

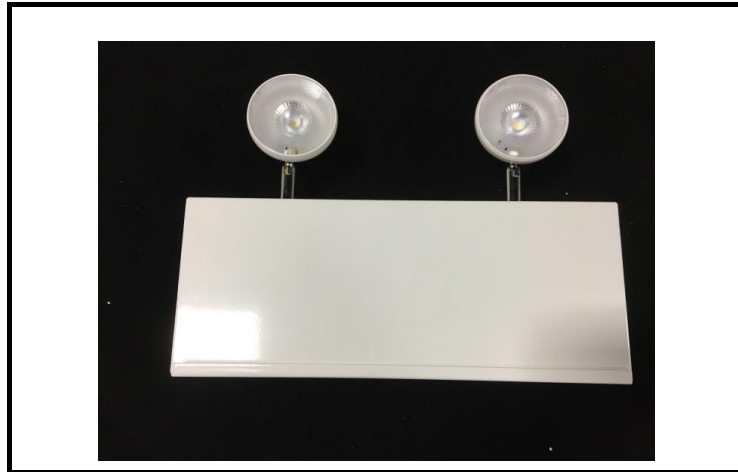
Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** White coated steel emergency light, frosted lens enclosure  
**Lamp:** Three white LEDs  
**Mounting:** Surface – Wall  
**Note:** Sample was tested with only one lamp head powered

**Luminaire**



**Luminaire Characteristics**

Luminous Length: 0.10 in.  
Luminous Width: 2.500 in.  
Luminous Height: 2.50 in.

**Summary of Results**

Total Luminaire Output: 335.6 Lumens  
Luminaire Efficacy: 104.1 lm/w  
Maximum Candela: 846 Candela

**Test Conditions**

Test Temperature: 25.0 °C  
Voltage: 9.460 VDC  
Current: 0.3407 A  
Power: 3.223 W  
Power Factor: 1.000

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

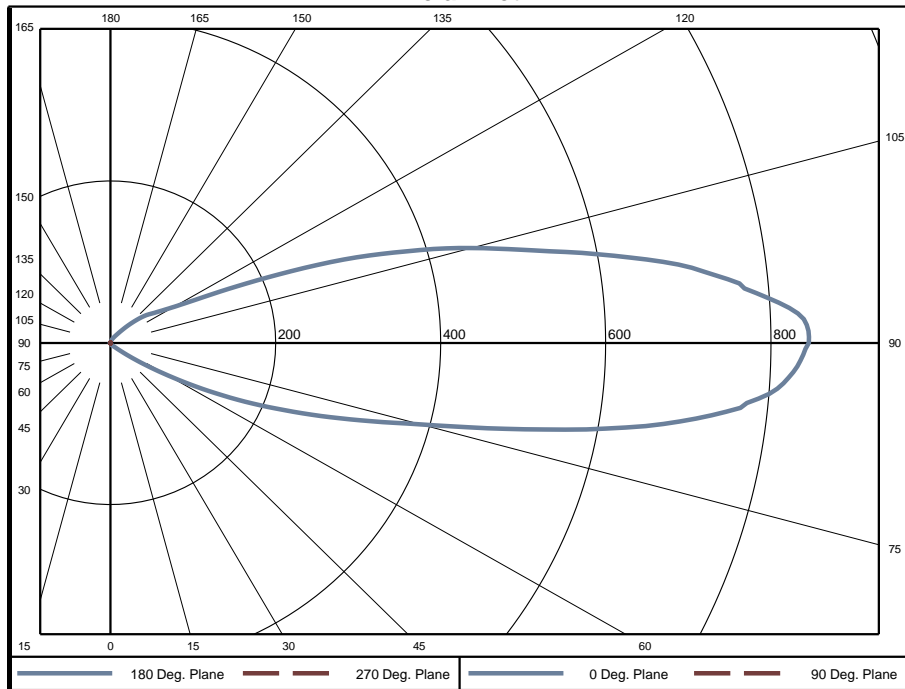
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	9.460 VDC	0.3407 A	3.223 W	N/A	N/A	N/A

### Summary of Results

<b>Spacing Criteria</b>	<b>Total Lumen Output:</b>	335.6 Lumens
0-180: 69.45	<b>Luminaire Efficacy:</b>	104.1 lm/w
90-270: 2.34	<b>Maximum Candela:</b>	846 Candela
<b>Corrected UGR (Room Dimension: X=4H, Y=8H, Reflectances: 70/50/20%, S/H: 1)</b>	<b>Endwise:</b>	39.3
<b>Crosswise:</b> 45.7		

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.00	0.0%	60-65	7.70	2.3%	120-125	5.58	1.7%
5-10	0.01	0.0%	65-70	13.08	3.9%	125-130	3.77	1.1%
10-15	0.03	0.0%	70-75	19.33	5.8%	130-135	2.42	0.7%
15-20	0.08	0.0%	75-80	27.83	8.3%	135-140	1.46	0.4%
20-25	0.15	0.0%	80-85	37.87	11.3%	140-145	0.90	0.3%
25-30	0.24	0.1%	85-90	43.81	13.1%	145-150	0.58	0.2%
30-35	0.35	0.1%	90-95	44.86	13.4%	150-155	0.37	0.1%
35-40	0.48	0.1%	95-100	39.78	11.9%	155-160	0.22	0.1%
40-45	0.66	0.2%	100-105	31.34	9.3%	160-165	0.11	0.0%
45-50	0.98	0.3%	105-110	22.86	6.8%	165-170	0.04	0.0%
50-55	1.79	0.5%	110-115	14.56	4.3%	170-175	0.01	0.0%
55-60	3.81	1.1%	115-120	8.58	2.6%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	1	0.4%
0-60	9	2.6%
0-90	158	47.1%
90-180	177	52.9%



**Candela Tabulation**  
Horizontal Angle (Degrees)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
10	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3
15	1.4	1.3	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	1.3
20	2.3	2.2	1.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.2	2.2
25	2.8	2.8	1.7	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.7	2.8
30	3.4	3.3	2.6	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	2.6	3.3
35	4.2	3.9	3.1	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1	3.1	3.9
40	5.3	4.7	3.6	1.5	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	1.5	3.6	4.7
45	7.4	6.2	4.1	1.9	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	1.9	4.1	6.2
50	13.5	9.8	4.7	2.2	0.1	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.1	2.2	4.7	9.8
55	33.0	20.0	5.5	2.6	0.1	0.0	0.1	0.1	0.3	0.1	0.1	0.0	0.1	2.6	5.5	20.0
60	80.1	40.8	6.8	3.0	0.1	0.0	0.1	0.2	0.4	0.2	0.1	0.0	0.1	3.0	6.8	40.8
65	159.9	72.0	8.9	3.3	0.1	0.1	0.1	0.2	0.5	0.2	0.1	0.1	0.1	3.3	8.9	72.0
70	259.1	102.8	12.3	3.6	0.1	0.1	0.1	0.3	0.5	0.3	0.1	0.1	0.1	3.6	12.3	102.8
75	388.8	132.1	16.0	3.7	0.1	0.1	0.1	0.4	0.5	0.4	0.1	0.1	0.1	3.7	16.0	132.1
80	609.2	161.5	19.1	3.7	0.1	0.1	0.1	0.4	0.5	0.4	0.1	0.1	0.1	3.7	19.1	161.5
85	788.4	191.3	20.6	3.7	0.1	0.1	0.1	0.4	0.4	0.4	0.1	0.1	0.1	3.7	20.6	191.3
90	846.0	214.0	19.9	3.6	0.1	0.1	0.1	0.4	0.4	0.4	0.1	0.1	0.1	3.6	19.9	214.0
95	771.0	221.1	17.9	3.4	0.1	0.1	0.1	0.3	0.4	0.3	0.1	0.1	0.1	3.4	17.9	221.1
100	619.3	200.5	15.1	3.2	0.1	0.1	0.1	0.3	0.3	0.3	0.1	0.1	0.1	3.2	15.1	200.5
105	452.2	168.6	12.2	3.0	0.1	0.0	0.1	0.2	0.3	0.2	0.1	0.0	0.1	3.0	12.2	168.6
110	300.8	124.9	9.7	2.8	0.1	0.0	0.1	0.2	0.2	0.2	0.1	0.0	0.1	2.8	9.7	124.9
115	157.5	87.3	8.1	2.7	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	2.7	8.1	87.3
120	88.9	59.4	7.0	2.5	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	2.5	7.0	59.4
125	64.4	40.2	6.2	2.3	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	2.3	6.2	40.2
130	49.3	25.7	5.5	2.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	2.0	5.5	25.7
135	30.9	16.4	4.9	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.7	4.9	16.4
140	17.5	10.8	4.3	1.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.5	4.3	10.8
145	11.0	7.8	3.7	1.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1	3.7	7.8
150	7.5	5.7	3.0	0.8	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.8	3.0	5.7
155	5.2	4.1	2.3	0.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	2.3	4.1
160	3.3	2.7	1.5	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	1.5	2.7
165	1.8	1.5	0.6	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.6	1.5
170	0.5	0.5	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.5
175	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2
180	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

	0	45	90
0	262	262	262
45	65160	36000	670
55	357200	59550	882
65	2346000	131100	1385
75	9314000	382500	2505
85	56080000	1467000	8143



**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 20%

Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	86	77	69	62	77	70	62	56	55	49	44	42	38	33	30	27	23	17
2	75	63	53	44	67	57	47	40	44	37	31	33	27	22	22	18	14	8
3	67	54	43	34	60	48	38	30	37	29	23	27	21	16	18	13	9	4
4	61	46	36	28	54	41	32	24	32	24	18	23	17	13	15	11	7	3
5	56	41	30	23	50	37	27	20	28	21	15	21	15	10	14	9	5	2
6	51	36	26	19	46	33	24	17	25	18	13	19	13	9	12	8	4	1
7	47	33	23	16	42	29	21	15	23	16	11	17	11	7	11	7	4	1
8	44	29	20	14	39	26	18	13	21	14	9	15	10	6	10	6	3	1
9	41	27	18	12	37	24	16	11	19	13	8	14	9	6	10	6	3	0
10	38	25	16	11	34	22	15	10	18	11	7	13	8	5	9	5	2	0

<b>Beam and Field Information About Max Intensity</b>	
CIE Type:	Direct/Indirect
Center Beam Intensity:	0 Candela
Central Cone Intensity:	0 Candela
Beam Flux:	0.0 Lumens
Beam Angle (0-180):	0.0 Degrees
Beam Angle (90-270):	0.0 Degrees
Field Angle (0-180):	0.0 Degrees
Field Angle (90-270):	0.0 Degrees



### ISOFootcandle Plot

Mounting Height - 8 Feet

