



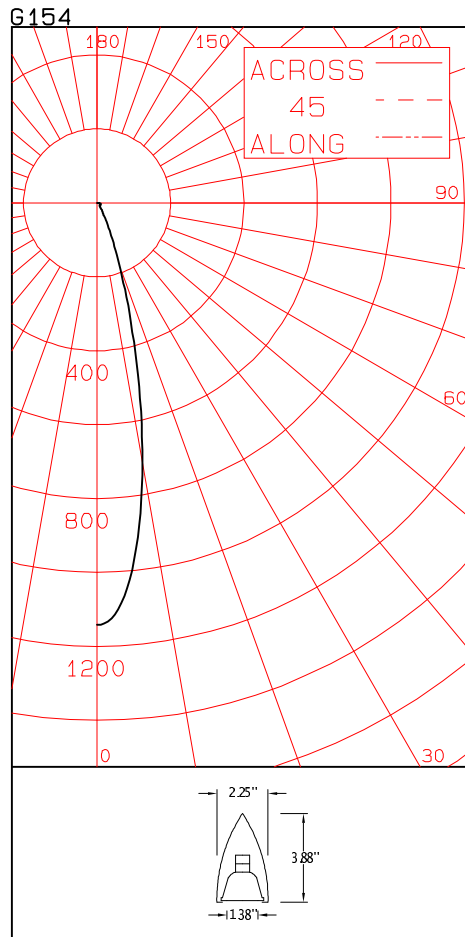
LIGHTING SCIENCES CANADA LTD.

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CERTIFIED TEST REPORT NO. LSC G154
COMPUTED BY LSC PROGRAM **TEST-LITE**

LED 12V WITH INDIVIDUAL LED LENS OPTICS
ONE 12V 7W 6 LED MR16 LAMP. LUMEN OUTPUT = 283 LMS.

CANDLEPOWER SUMMARY



ANGLE	MEAN CP	LUMENS
0	1142	
5	1024	88
10	714	
15	390	107
20	179	
25	75	38
30	32	
35	17	12
40	12	
45	10	8
50	9	
55	10	9
60	11	
65	12	12
70	11	
75	8	8
80	4	
85	1	1
90	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	232	82.24	82.24
0-40	244	86.32	86.32
0-60	261	92.38	92.38
0-90	283	100.00	100.00
40-90	38	13.68	13.68
60-90	21	7.62	7.62
90-180	0	.00	.00
0-180	283	100.00	100.00

** EFFICACY = 48.9 LMS/WATT **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = .4
SC = .4

ANGLE	MEAN CD/SQ M
45	15546
55	17936
65	30846
75	33216
85	8085

CERTIFIED BY:

Charles Lison

DATE:
SEP 27, 2012

PREPARED FOR:

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE
TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

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CANDLEPOWER DATA
IN 2.5 DEGREE STEPS

ANGLE	CANDLEPOWER	LUMENS
.0	1142	
2.5	1114	
5.0	1024	88
7.5	879	
10.0	714	
12.5	542	
15.0	390	107
17.5	268	
20.0	179	
22.5	117	
25.0	75	38
27.5	48	
30.0	32	
32.5	23	
35.0	17	12
37.5	14	
40.0	12	
42.5	11	
45.0	10	8
47.5	10	
50.0	9	
52.5	10	
55.0	10	9
57.5	11	
60.0	11	
62.5	12	
65.0	12	12
67.5	12	
70.0	11	
72.5	10	
75.0	8	8
77.5	6	
80.0	4	
82.5	2	
85.0	1	1
87.5	0	
90.0	0	

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AVERAGE LUMINANCE DATA

ANGLE	LUMINANCE	
0	1192107	(347934)
30	38583	(11261)
40	16403	(4787)
45	15546	(4537)
50	15398	(4494)
55	17936	(5235)
60	23867	(6966)
65	30846	(9003)
70	34071	(9944)
75	33216	(9694)
80	23447	(6843)
85	8085	(2359)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50				30				10				0
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00		
1	1.14	1.12	1.10	1.08	1.12	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	1.00		.99	.98	.97	.95		
2	1.10	1.06	1.02	.99	1.08	1.04	1.01	.98	1.00	.98	.96	.98	.96	.94	.95	.94	.92	.90			
3	1.06	1.00	.96	.93	1.04	.99	.96	.93	.97	.94	.91	.95	.92	.90	.92	.90	.88	.87			
4	1.02	.97	.92	.89	1.01	.96	.92	.88	.93	.90	.87	.92	.89	.86	.90	.87	.85	.84			
5	.99	.93	.88	.85	.98	.92	.88	.85	.90	.87	.84	.89	.86	.83	.87	.85	.82	.81			
6	.97	.90	.85	.82	.95	.89	.85	.82	.88	.84	.81	.87	.83	.81	.85	.83	.80	.79			
7	.94	.87	.83	.80	.93	.87	.82	.79	.85	.82	.79	.84	.81	.78	.83	.80	.78	.77			
8	.92	.85	.80	.78	.91	.84	.80	.77	.83	.80	.77	.82	.79	.77	.81	.79	.76	.75			
9	.89	.83	.78	.75	.89	.82	.78	.75	.81	.78	.75	.81	.77	.75	.80	.77	.75	.74			
10	.87	.80	.77	.74	.86	.80	.77	.74	.79	.76	.73	.79	.76	.73	.78	.75	.73	.72			

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 5.8
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 ABSOLUTE PHOTOMETRY TAKEN.

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SUPPLEMENTARY MEASUREMENTS AS PER IES-LM-79-08

STABILIZATION TIME: 1 HOUR 15 MINUTES

ELECTRICAL CONSUMPTION

INPUT VOLTAGE: 12.0 VDC
INPUT CURRENT: 0.482 ADC
INPUT WATTAGE: 5.784
POWER FACTOR: 1.000

CHROMATICITY MEASUREMENTS

CIE 1931-x: 0.431
CIE 1931-y: 0.396
CORRELATED COLOUR TEMPERATURE: 3031 DEG. K
COLOUR RENDERING INDEX: 89.3%