

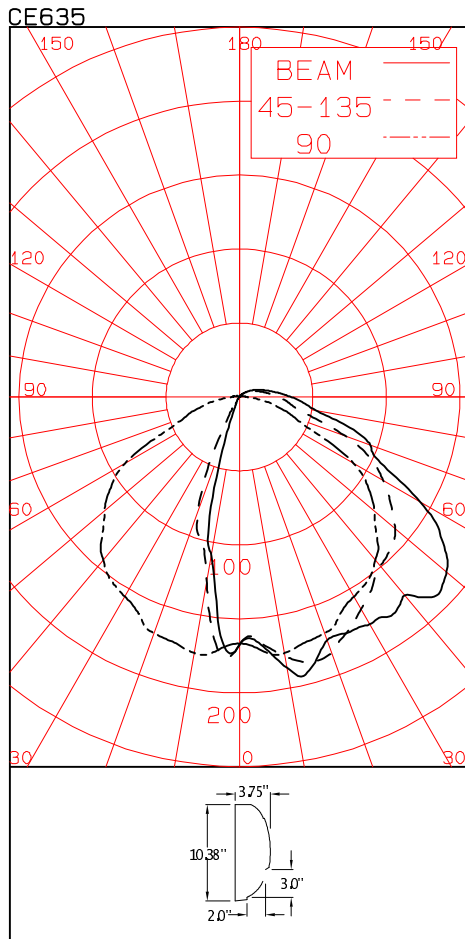


LIGHTING SCIENCES CANADA LTD.

160 Frobisher Drive, Unit 5, Waterloo, Ontario, Canada N2V 2B1
 Tel: (519) 746-3140 Fax: (519) 746-3156 lsc@lightingsciences.ca

CERTIFIED TEST REPORT NO. LSC E635
 COMPUTED BY LSC PROGRAM **TEST-LITE**

BEGHELLI MEZZO LED EMERGENCY LIGHT
 WITH PRISMATIC LENS
 LEDS. LUMEN OUTPUT = 438 LMS.



ANGLE	CANDLEPOWER SUMMARY				BEAM	OUTPUT LUMENS
	BEAM SIDE					
0	167	167	167	167	167	
5	172	167	167	167	168	8
15	172	178	186	193	190	26
25	162	185	175	178	176	41
35	152	172	158	164	180	52
45	132	152	145	152	190	59
55	107	130	126	143	168	60
65	56	90	98	106	106	47
75	28	50	50	59	76	28
85	9	22	32	39	44	17
90	5	17	26	32	35	
95	4	14	22	26	28	11
105	2	9	14	17	17	7
115	1	5	9	11	11	4
125	1	3	5	6	6	2
135	0	1	2	3	3	1
145	0	0	0	1	1	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	111	25.48	25.48
0-40	175	40.11	40.11
0-60	313	71.58	71.58
0-90	413	94.35	94.35
40-90	237	54.24	54.24
60-90	99	22.77	22.77
90-180	24	5.65	5.65
0-180	438	100.00	100.00

** EFFICACY = 32.6 LMS/WATT **

LUMINANCE SUMMARY-CD. / SQ. M.

ANGLE	BEAM SIDE		
	90	45	BEAM SIDE
45	13536	15093	31877
55	10648	12690	29694
65	5577	9922	20419
75	2878	5181	16539
85	986	3579	11494

CERTIFIED BY:

Charles Sisson

DATE:

NOV 10, 2010

PREPARED FOR:

BEGHELLI CANADA INC.
 MARKHAM, ONTARIO

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

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COEFFICIENTS OF UTILIZATION
 ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	1.181	1.181	1.181	1.18	1.141	1.141	1.141	1.14	1.081	1.081	1.08	1.021	1.021	1.02	.97	.97	.97	.97	.97	.97	.94
1	1.071	1.02	.98	.94	1.041	1.00	.96	.92	.94	.91	.88	.89	.87	.84	.85	.83	.81	.85	.83	.81	.79
2	.98	.90	.84	.78	.95	.88	.82	.76	.83	.78	.74	.79	.75	.71	.75	.72	.69	.75	.72	.69	.66
3	.90	.79	.72	.65	.87	.77	.70	.64	.74	.68	.63	.70	.65	.61	.67	.63	.59	.67	.63	.59	.57
4	.83	.71	.63	.56	.80	.69	.62	.55	.66	.59	.54	.63	.58	.53	.61	.56	.52	.61	.56	.52	.49
5	.76	.64	.55	.48	.73	.62	.54	.48	.59	.52	.47	.57	.51	.46	.54	.49	.45	.54	.49	.45	.43
6	.70	.57	.48	.42	.68	.56	.47	.42	.53	.46	.41	.51	.45	.40	.49	.43	.39	.49	.43	.39	.37
7	.64	.51	.43	.37	.62	.50	.42	.36	.48	.41	.35	.46	.40	.35	.44	.39	.34	.44	.39	.34	.32
8	.60	.46	.38	.32	.58	.45	.38	.32	.44	.37	.32	.42	.36	.31	.40	.35	.30	.40	.35	.30	.28
9	.56	.42	.34	.29	.54	.42	.34	.28	.40	.33	.28	.38	.32	.27	.37	.31	.27	.37	.31	.27	.25
10	.52	.39	.31	.26	.50	.38	.31	.25	.37	.30	.25	.35	.29	.24	.34	.28	.24	.34	.28	.24	.22

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 13.5
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 ABSOLUTE PHOTOMETRY TAKEN.

LIGHTING SCIENCES CANADA LTD.
 160 FROBISHER DRIVE, UNIT 5
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BEAM SIDE
 CANDLEPOWER DATA

ANGLE	PLANE				BEAM SIDE	AVERAGE	OUTPUT LUMENS
	90	67.5	45	22.5			
0	167	167	167	167	167	167	
5	172	167	167	167	168	168	8
10	176	174	178	183	186	179	
15	172	178	186	193	190	184	26
20	170	183	184	186	175	181	
25	162	185	175	178	176	177	41
30	156	180	166	167	178	170	
35	152	172	158	164	180	165	52
40	144	163	149	162	175	159	
45	132	152	145	152	190	153	59
50	120	140	138	151	184	145	
55	107	130	126	143	168	134	60
60	90	114	113	127	142	118	
65	56	90	98	106	106	94	47
70	39	67	76	77	95	72	
75	28	50	50	59	76	53	28
80	19	35	37	46	53	39	
85	9	22	32	39	44	30	17
90	5	17	26	32	35	24	
95	4	14	22	26	28	20	11
100	3	11	17	21	22	16	
105	2	9	14	17	17	13	7
110	2	7	11	14	14	10	
115	1	5	9	11	11	8	4
120	1	4	7	8	8	6	
125	1	3	5	6	6	4	2
130	0	2	3	4	4	3	
135	0	1	2	3	3	2	1
140	0	0	1	2	2	1	
145	0	0	0	1	1	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	

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BEGHELLI MEZZO LED EMERGENCY LIGHT
 WITH PRISMATIC LENS
 LEDS. LUMEN OUTPUT = 438 LMS.

BEAM SIDE
 AVERAGE LUMINANCE DATA

ANGLE	CD. / SQ. M. (FOOTLAMBERTS)					BEAM SIDE
	90	67.5	45	22.5		
0	32933 (9612)	32933 (9612)	32933 (9612)	32933 (9612)	32933 (9612)	32933 (9612)
30	17818 (5200)	19923 (5815)	19109 (5577)	21914 (6396)	29151 (8508)	29151 (8508)
40	15173 (4428)	16499 (4815)	15901 (4640)	20195 (5894)	28867 (8425)	28867 (8425)
45	13536 (3950)	14948 (4362)	15093 (4405)	18692 (5455)	31877 (9304)	31877 (9304)
50	12075 (3524)	13410 (3913)	14090 (4112)	18395 (5369)	31403 (9165)	31403 (9165)
55	10648 (3107)	12268 (3580)	12690 (3703)	17481 (5102)	29694 (8666)	29694 (8666)
60	8925 (2605)	10710 (3126)	11360 (3315)	15651 (4568)	25998 (7588)	25998 (7588)
65	5577 (1627)	8499 (2480)	9922 (2896)	13224 (3859)	20419 (5959)	20419 (5959)
70	3930 (1147)	6421 (1874)	7804 (2277)	9897 (2888)	19299 (5632)	19299 (5632)
75	2878 (840)	4801 (1401)	5181 (1512)	7794 (2274)	16539 (4827)	16539 (4827)
80	2008 (586)	3437 (1003)	4027 (1175)	6412 (1871)	12519 (3653)	12519 (3653)
85	986 (288)	2206 (643)	3579 (1044)	5682 (1658)	11494 (3354)	11494 (3354)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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BEGHELLI MEZZO LED EMERGENCY LIGHT
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 LEDS. LUMEN OUTPUT = 438 LMS.

OPPOSITE SIDE TO BEAM
 CANDLEPOWER DATA

ANGLE	PLANE					AVERAGE	OUTPUT LUMENS
	90	112.5	135	157.5	NON- BEAM		
0	167	167	167	167	167	167	
5	172	176	171	162	158	168	8
10	176	170	128	108	109	137	
15	172	150	99	83	70	113	15
20	170	123	82	32	19	83	
25	162	99	46	9	6	60	14
30	156	91	12	5	3	47	
35	152	74	7	3	2	40	13
40	144	60	5	2	0	35	
45	132	44	4	1	0	29	11
50	120	28	4	0	0	23	
55	107	20	3	0	0	19	8
60	90	14	2	0	0	15	
65	56	7	1	0	0	9	5
70	39	5	1	0	0	6	
75	28	4	1	0	0	5	3
80	19	3	0	0	0	3	
85	9	2	0	0	0	2	1
90	5	2	0	0	0	1	
95	4	1	0	0	0	1	0
100	3	1	0	0	0	1	
105	2	0	0	0	0	0	0
110	2	0	0	0	0	0	
115	1	0	0	0	0	0	0
120	1	0	0	0	0	0	
125	1	0	0	0	0	0	0
130	0	0	0	0	0	0	
135	0	0	0	0	0	0	0
140	0	0	0	0	0	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	

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 WITH PRISMATIC LENS
 LEDS. LUMEN OUTPUT = 438 LMS.

OPPOSITE SIDE TO BEAM
 AVERAGE LUMINANCE DATA

ANGLE	CD. / SQ. M.		(FOOTLAMBERTS)		NON-BEAM	
	90	112.5	135	157.5		
0	32933 (9612)	32933 (9612)	32933 (9612)	32933 (9612)	32933 (9612)	32933 (9612)
30	17818 (5200)	10048 (2932)	1414 (412)	618 (180)	557 (162)	
40	15173 (4428)	6118 (1785)	584 (170)	195 (57)	81 (23)	
45	13536 (3950)	4342 (1267)	449 (131)	81 (23)	0 (0)	
50	12075 (3524)	2689 (785)	356 (104)	13 (3)	0 (0)	
55	10648 (3107)	1858 (542)	280 (81)	0 (0)	0 (0)	
60	8925 (2605)	1289 (376)	211 (61)	0 (0)	0 (0)	
65	5577 (1627)	701 (204)	150 (43)	0 (0)	0 (0)	
70	3930 (1147)	507 (148)	105 (30)	0 (0)	0 (0)	
75	2878 (840)	405 (118)	74 (21)	0 (0)	0 (0)	
80	2008 (586)	315 (92)	48 (14)	0 (0)	0 (0)	
85	986 (288)	233 (68)	26 (7)	0 (0)	0 (0)	

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

LIGHTING SCIENCES CANADA LTD.
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WATERLOO, ONTARIO

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BEGHELLI MEZZO LED EMERGENCY LIGHT
WITH PRISMATIC LENS
LEDS. LUMEN OUTPUT = 438 LMS.

SUPPLEMENTARY MEASUREMENTS AS PER IES-LM-79-08
AND ADDITION ELECTRICAL AND SPECTRAL MEASUREMENTS

STABILIZATION TIME: 1 HOUR 30 MINUTES

ELECTRICAL CONSUMPTION (ON)

INPUT VOLTAGE: 120.0 VRMS
INPUT CURRENT: 0.137 ARMS
INPUT WATTAGE: 13.46
POWER FACTOR: 0.819
TOTAL HARMONIC DISTORTION: 58.2

ELECTRICAL CONSUMPTION (OFF)

INPUT VOLTAGE: 120.0 VRMS
INPUT CURRENT: 0.042 ARMS
INPUT WATTAGE: 2.84
POWER FACTOR: 0.563
TOTAL HARMONIC DISTORTION: 36.8

CHROMATICITY MEASUREMENTS

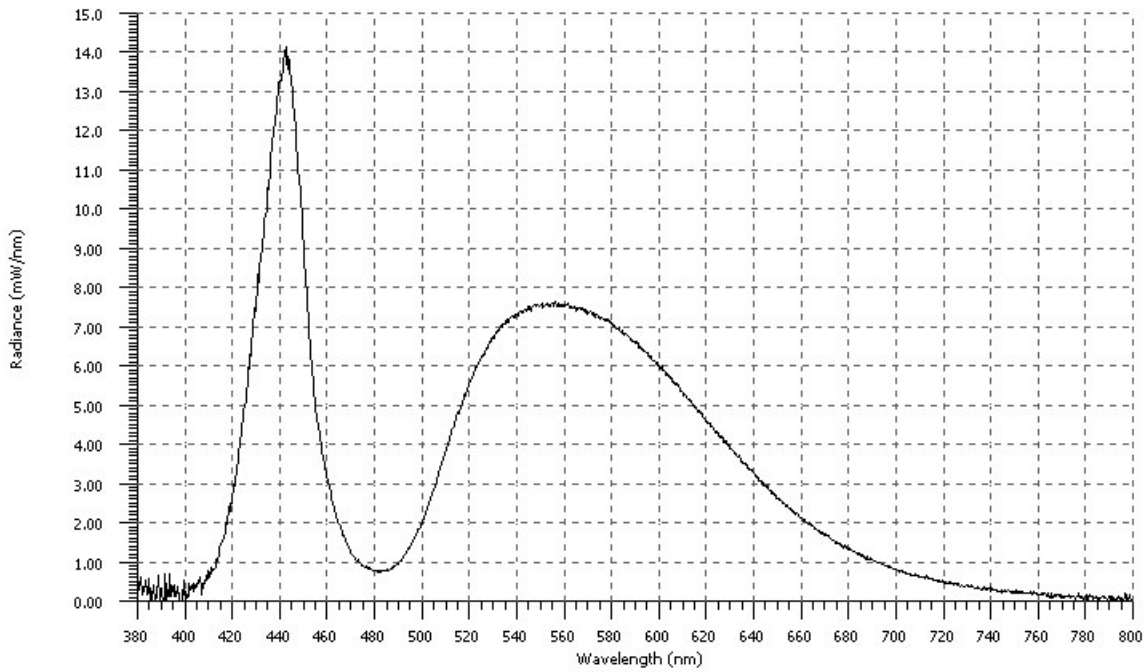
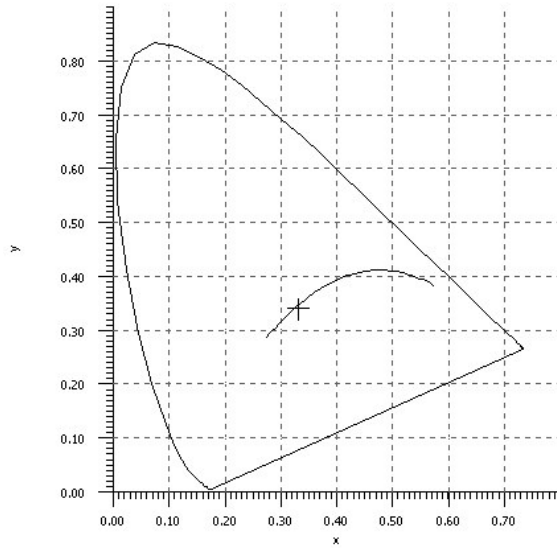
CIE 1931-x: 0.332
CIE 1931-y: 0.340
CIE 1960-u: 0.207
CIE 1960-v: 0.318
CORRELATED COLOUR TEMPERATURE: 5508 DEG. K
COLOUR RENDERING INDEX: 66.9%

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LEDS. LUMEN OUTPUT = 438 LMS.

CIE 1931 Chromaticity Diagram



TOTAL RADIANCE (mW) : 1894.5
TOTAL LUMENS : 438.32
INPUT WATTS : 13.46
EFFICACY (LMS/WATT) : 32.6