

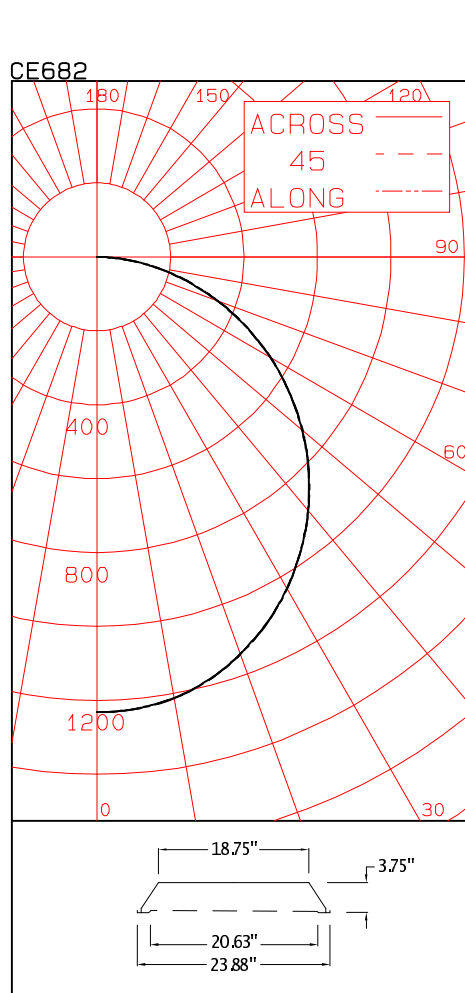


LIGHTING SCIENCES CANADA LTD.

160 Frobisher Drive, Unit 5, Waterloo, Ontario, Canada N2V 2B1
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CERTIFIED TEST REPORT NO. LSC E682
 COMPUTED BY LSC PROGRAM **TEST-LITE**

JAFTECH LED 2x2 T-BAR RECESSED FIXTURE CAT. NO. LS22-80x4-1UF-50
 WITH WHITE TRANSLUCENT LENS PANEL
 FOUR SAMSUNG LED PANELS NO. FPLS259L352-LCP. LUMEN OUTPUT = 3544 LMS.
 SAMSUNG 120-277V LED DRIVER NO. SA-5166C



CANDLEPOWER SUMMARY OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	1232	1232	1232	1232	1232	
5	1227	1228	1227	1226	1227	118
10	1213	1212	1212	1212	1212	
15	1184	1184	1184	1183	1183	333
20	1143	1144	1143	1143	1143	
25	1094	1094	1094	1093	1094	503
30	1036	1036	1036	1035	1035	
35	968	968	968	968	968	605
40	895	895	895	894	895	
45	815	815	815	815	814	627
50	732	730	730	728	729	
55	639	639	639	639	639	570
60	545	544	547	545	546	
65	448	448	448	448	449	443
70	350	349	349	352	351	
75	252	252	254	252	252	267
80	159	158	159	159	158	
85	69	69	69	68	68	78
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	954	26.93	26.93
0-40	1559	43.99	43.99
0-60	2757	77.78	77.78
0-90	3544	100.00	100.00
40-90	1985	56.01	56.01
60-90	787	22.22	22.22
90-180	0	.00	.00
0-180	3544	100.00	100.00

** EFFICACY = 68.9 LMS/WATT **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.2
 SC = 1.2

ANGLE	ALONG	45	ACROSS
45	4198	4211	4208
55	4058	4073	4073
65	3857	3870	3886
75	3542	3577	3564
85	2900	2885	2843

CERTIFIED BY:

Charles Sisson

DATE:
 DEC 17, 2010

PREPARED FOR:

JAFTECH MANUFACTURING LTD.
 NEWMARKET, ONTARIO

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	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
.0	1232	1232	1232	1232	1232	1232	
2.5	1231	1231	1231	1230	1230	1231	
5.0	1227	1228	1227	1226	1227	1227	118
7.5	1221	1222	1221	1221	1221	1221	
10.0	1213	1212	1212	1212	1212	1212	
12.5	1200	1200	1199	1199	1199	1199	
15.0	1184	1184	1184	1183	1183	1183	333
17.5	1165	1165	1164	1164	1164	1164	
20.0	1143	1144	1143	1143	1143	1143	
22.5	1120	1120	1120	1119	1119	1120	
25.0	1094	1094	1094	1093	1094	1094	503
27.5	1066	1066	1066	1065	1066	1066	
30.0	1036	1036	1036	1035	1035	1035	
32.5	1002	1003	1003	1002	1002	1003	
35.0	968	968	968	968	968	968	605
37.5	932	932	932	931	932	932	
40.0	895	895	895	894	895	894	
42.5	856	855	855	854	855	855	
45.0	815	815	815	815	814	815	627
47.5	774	773	773	772	773	773	
50.0	732	730	730	728	729	730	
52.5	684	687	685	684	685	685	
55.0	639	639	639	639	639	639	570
57.5	592	592	593	592	593	593	
60.0	545	544	547	545	546	545	
62.5	496	497	497	496	497	497	
65.0	448	448	448	448	449	448	443
67.5	399	398	399	400	401	399	
70.0	350	349	349	352	351	350	
72.5	301	301	301	302	300	301	
75.0	252	252	254	252	252	253	267
77.5	204	205	206	204	206	205	
80.0	159	158	159	159	158	158	
82.5	114	114	114	113	112	114	
85.0	69	69	69	68	68	69	78
87.5	27	26	26	26	25	26	
90.0	0	0	0	0	0	0	

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 SAMSUNG 120-277V LED DRIVER NO. SA-5166C

AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)			ACROSS
		22.5	45	67.5	
0	4486 (1309)	4486 (1309)	4486 (1309)	4486 (1309)	4486 (1309)
30	4355 (1271)	4367 (1274)	4366 (1274)	4361 (1272)	4353 (1270)
40	4253 (1241)	4264 (1244)	4257 (1242)	4259 (1243)	4253 (1241)
45	4198 (1225)	4203 (1226)	4211 (1229)	4207 (1228)	4208 (1228)
50	4145 (1209)	4152 (1211)	4134 (1206)	4138 (1207)	4130 (1205)
55	4058 (1184)	4065 (1186)	4073 (1188)	4070 (1188)	4073 (1188)
60	3969 (1158)	3979 (1161)	3989 (1164)	3979 (1161)	3973 (1159)
65	3857 (1125)	3860 (1126)	3870 (1129)	3869 (1129)	3886 (1134)
70	3729 (1088)	3725 (1087)	3728 (1088)	3754 (1095)	3740 (1091)
75	3542 (1034)	3564 (1040)	3577 (1044)	3555 (1037)	3564 (1040)
80	3328 (971)	3330 (971)	3341 (975)	3333 (972)	3306 (964)
85	2900 (846)	2910 (849)	2885 (842)	2865 (836)	2843 (829)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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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	1.19	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	1.06	1.02	1.02	1.02	1.02	1.00
1	1.09	1.05	1.01	.97	1.07	1.03	.99	.95	.98	.95	.92	.94	.92	.89	.91	.89	.87	.87	.87	.87	.85
2	1.00	.92	.86	.80	.98	.90	.84	.79	.87	.82	.78	.84	.80	.76	.81	.77	.74	.74	.74	.74	.72
3	.91	.81	.74	.67	.89	.80	.73	.67	.77	.71	.66	.74	.69	.65	.72	.67	.63	.63	.63	.63	.61
4	.84	.73	.65	.58	.82	.72	.64	.58	.69	.62	.57	.67	.61	.56	.65	.60	.55	.55	.55	.55	.53
5	.78	.65	.56	.50	.75	.64	.56	.50	.62	.55	.49	.60	.53	.49	.58	.53	.48	.48	.48	.48	.46
6	.71	.58	.50	.43	.69	.57	.49	.43	.55	.48	.43	.54	.47	.42	.52	.46	.42	.42	.42	.42	.40
7	.66	.52	.44	.38	.64	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.36	.36	.36	.34
8	.61	.47	.39	.33	.59	.47	.39	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.32	.32	.32	.30
9	.56	.43	.35	.29	.55	.42	.35	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.28	.28	.28	.27
10	.52	.39	.31	.26	.51	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.25	.25	.25	.24

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 51.4
 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

ELECTRICAL CONSUMPTION

INPUT VOLTAGE: 120.0 VRMS
INPUT CURRENT: 0.435 ARMS
INPUT WATTAGE: 51.44
POWER FACTOR: 0.985

CHROMATICITY MEASUREMENTS

CIE 1931-x: 0.330
CIE 1931-y: 0.336
CORRELATED COLOUR TEMPERATURE: 5613 DEG. K
COLOUR RENDERING INDEX: 85.4%