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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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REPORT NUMBER: ITL77196

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ISSUE DATE: 06/12/13

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 2-6109-24

LUMINAIRE: FORMED METAL HOUSING WITH WHITE PAINTED INTERIOR FINISH, TRANSLUCENT WHITE ACRYLIC DIFFUSER, 2 FABRICATED SEMI-DIFFUSE METAL DIFFUSER MOUNTING RINGS WITH 3 VERTICAL SUPPORT RODS. BALLAST IS EXPOSED AND CENTERED IN THE OPTICAL COMPARTMENT.

LAMP: ONE 22-WATT T-9 CIRCULAR FLUORESCENT, SATCO FC8T9/WW, HORIZONTAL POSITION.

TOTAL INPUT WATTS = 15.8 AT 120.0 VOLTS

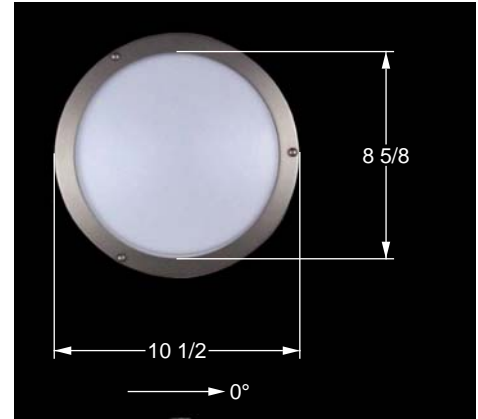
TOTAL REFLECTANCE OF PAINT = 81.0 %

MOUNTING: SURFACE

LED DRIVER: FULHAM WH2-120-C

NOTE: ACRYLIC MATERIAL INFORMATION PROVIDED BY CLIENT.

REPORT IS BASED ON 1050 LUMENS PER LAMP.



CANDELA DISTRIBUTION						FLUX
	0.0	45.0	90.0	135.0	180.0	
0	89.5	89.5	89.5	89.5	89.5	
5	88.6	88.8	89.2	89.6	89.7	8
15	84.8	85.3	86.8	88.2	88.7	25
25	78.5	79.7	82.2	84.4	85.2	38
35	71.0	72.8	76.6	79.5	80.6	48
45	62.4	64.9	69.7	73.2	74.6	53
55	52.4	55.7	61.5	65.3	66.6	54
65	41.8	45.7	52.2	56.4	57.5	50
75	31.2	35.8	43.1	47.0	47.9	44
85	23.8	28.6	35.9	39.2	39.5	37
90	20.7	25.3	32.2	35.1	35.2	
95	17.9	22.3	28.5	31.0	31.2	29
105	14.7	18.4	23.6	25.7	26.0	23
115	12.7	16.2	21.1	22.9	23.5	19
125	9.5	12.6	16.7	18.1	18.7	14
135	6.2	8.7	11.8	12.7	13.1	8
145	3.3	4.6	6.1	6.6	6.9	4
155	1.6	1.9	2.4	2.6	2.7	1
165	0.6	0.8	1.0	1.0	1.0	0
175	0.0	0.0	0.0	0.1	0.1	0
180	0.0	0.0	0.0	0.0	0.0	0

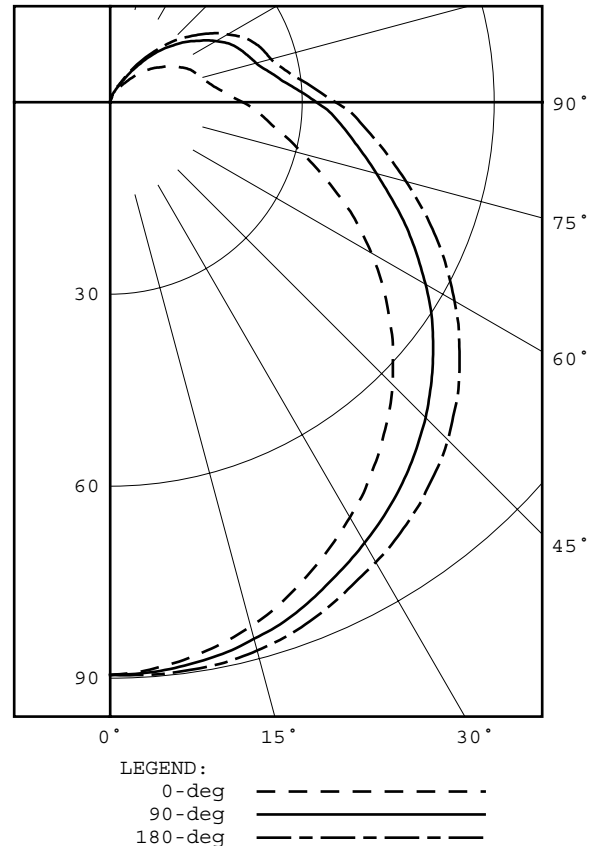
ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	71	6.8	15.5
0- 40	119	11.3	26.0
0- 60	226	21.5	49.5
0- 90	357	34.0	78.3
90-120	72	6.8	15.8
90-130	86	8.2	18.8
90-150	98	9.3	21.4
90-180	99	9.4	21.7
0-180	456	43.5	100.0

TOTAL LUMINAIRE EFFICIENCY = 43.5 %

CIE TYPE - SEMI-DIRECT

PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 1.25 1.33 1.39



Checked B. HYRE
 Approved R. BEATTIE
 Lighting Engineer



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
5.0	88.6	88.6	88.8	89.0	89.2	89.4	89.6	89.7	89.7
10.0	87.0	87.1	87.4	87.8	88.3	88.7	89.1	89.4	89.5
15.0	84.8	84.9	85.3	86.1	86.8	87.5	88.2	88.5	88.7
20.0	81.9	82.1	82.9	83.8	84.9	85.8	86.6	87.1	87.3
25.0	78.5	78.8	79.7	80.9	82.2	83.4	84.4	84.9	85.2
30.0	74.9	75.3	76.4	77.9	79.5	80.9	82.0	82.7	83.0
35.0	71.0	71.5	72.8	74.7	76.6	78.2	79.5	80.2	80.6
40.0	66.8	67.4	69.0	71.2	73.3	75.1	76.5	77.3	77.7
45.0	62.4	63.1	64.9	67.4	69.7	71.7	73.2	74.0	74.6
50.0	57.6	58.3	60.4	63.2	65.7	67.9	69.4	70.3	70.9
55.0	52.4	53.4	55.7	58.5	61.5	63.7	65.3	66.2	66.6
60.0	47.1	48.0	50.7	53.8	56.9	59.3	60.9	61.8	62.1
65.0	41.8	42.7	45.7	49.0	52.2	54.8	56.4	57.3	57.5
70.0	36.2	37.5	40.5	44.1	47.5	50.1	51.7	52.5	52.7
75.0	31.2	32.6	35.8	39.5	43.1	45.6	47.0	47.8	47.9
80.0	27.1	28.4	31.8	35.6	39.2	41.6	42.9	43.4	43.5
85.0	23.8	25.1	28.6	32.3	35.9	38.1	39.2	39.7	39.5
90.0	20.7	22.0	25.3	28.9	32.2	34.3	35.1	35.4	35.2
95.0	17.9	19.2	22.3	25.5	28.5	30.2	31.0	31.4	31.2
100.0	16.0	17.2	20.1	22.8	25.7	27.1	27.8	28.3	28.0
105.0	14.7	15.8	18.4	21.0	23.6	25.1	25.7	26.1	26.0
110.0	13.9	14.9	17.3	19.9	22.4	23.9	24.5	24.9	25.0
115.0	12.7	13.7	16.2	18.8	21.1	22.4	22.9	23.3	23.5
120.0	11.2	12.1	14.5	16.9	19.1	20.3	20.7	20.9	21.2
125.0	9.5	10.4	12.6	14.9	16.7	17.7	18.1	18.3	18.7
130.0	8.0	8.7	10.8	12.9	14.4	15.1	15.5	15.6	15.9
135.0	6.2	7.0	8.7	10.6	11.8	12.3	12.7	12.8	13.1
140.0	4.6	5.2	6.6	8.0	8.9	9.3	9.6	9.7	9.9
145.0	3.3	3.6	4.6	5.6	6.1	6.4	6.6	6.8	6.9
150.0	2.2	2.4	2.8	3.4	3.7	3.9	4.0	4.2	4.2
155.0	1.6	1.7	1.9	2.2	2.4	2.5	2.6	2.7	2.7
160.0	1.1	1.1	1.3	1.4	1.6	1.7	1.7	1.8	1.8
165.0	0.6	0.7	0.8	0.9	1.0	1.0	1.0	1.1	1.0
170.0	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.5
175.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	2
5- 10	6
10- 15	10
15- 20	14
20- 25	17
25- 30	20
30- 35	23
35- 40	25
40- 45	26
45- 50	27
50- 55	27
55- 60	27
60- 65	26
65- 70	25
70- 75	23
75- 80	21
80- 85	19
85- 90	18
90- 95	15
95-100	14
100-105	12
105-110	11
110-115	10
115-120	9
120-125	8
125-130	6
130-135	5
135-140	3
140-145	2
145-150	1
150-155	1
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	8
0- 20	33
0- 30	71
0- 40	119
0- 50	172
0- 60	226
0- 70	277
0- 80	320
0- 90	357
0-100	386
0-110	410
0-120	429
0-130	443
0-140	451
0-150	455
0-160	456
0-170	456
0-180	456



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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	49	49	49	49	47	47	47	47	43	43	43	39	39	39	36	36	36	34	
1	44	41	39	36	41	39	37	35	35	34	32	32	31	29	29	28	27	25	
2	39	35	32	29	37	33	30	28	30	28	25	27	25	23	25	23	22	20	
3	35	30	26	23	33	29	25	22	26	23	21	24	21	19	21	19	18	16	
4	32	27	22	19	30	25	22	19	23	20	17	21	18	16	19	17	15	14	
5	29	24	19	16	28	22	19	16	20	17	15	19	16	14	17	15	13	12	
6	27	21	17	14	26	20	16	14	18	15	13	17	14	12	15	13	11	10	
7	25	19	15	12	24	18	14	12	17	13	11	15	12	10	14	11	10	9	
8	23	17	13	11	22	16	13	10	15	12	10	14	11	9	13	10	9	8	
9	22	16	12	10	21	15	12	9	14	11	9	13	10	8	12	9	8	7	
10	20	14	11	9	19	14	11	8	13	10	8	12	9	7	11	9	7	6	

ALL CANDELA, LUMENS, LUMINANCE, COEFFICIENT OF UTILIZATION AND VCP VALUES IN THIS REPORT ARE BASED ON RELATIVE PHOTOMETRY WHICH ASSUMES A BALLAST FACTOR OF 1.000. ANY CALCULATIONS PREPARED FROM THESE DATA SHOULD INCLUDE AN APPROPRIATE BALLAST FACTOR.