

itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
NVLAP LAB CODE: 200925-0

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

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL82333

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ISSUE DATE: 07/29/14

PREPARED FOR: RAB LIGHTING, INC.

CATALOG NUMBER: TRLED2X4-50Y/D10

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED INTERIOR FINISH,
FORMED WHITE PAINTED METAL DRIVER COVER, 4 WHITE CIRCUIT BOARDS EACH
WITH 32 LEDS, CLEAR FLAT PRISMATIC PLASTIC LENS IN FABRICATED WHITE
PAINTED METAL FRAME. LENS PRISMS OUT.

LAMPS: ONE HUNDRED TWENTY-EIGHT WHITE LIGHT EMITTING DIODES (LEDs),
VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 50.4 AT 120.0 VOLTS

MOUNTING: RECESSED

LED DRIVER: RAB LIGHTING RDD-050W-450G,
DRIVER HAS MULTIPLE LEADS, ONLY LINE
INPUT AND LED OUTPUT LEADS CONNECTED
FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE
PROVIDED AT RATED INPUT VOLTAGE
(120VAC, 60Hz) TO THE DRIVER.
DRIVER INFORMATION PROVIDED
BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1750	1750	1750	1750	1750
5	1737	1744	1741	1739	1741
15	1651	1658	1654	1654	1654
25	1478	1482	1480	1481	1479
35	1223	1225	1223	1223	1218
45	923	923	920	916	908
55	630	628	622	612	608
65	391	386	377	374	377
75	226	222	218	220	225
85	81	77	80	81	87
90	0	0	0	0	0

FLUX

165
466
680
764
709
557
380
234
86

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	1312	32.5
0- 40	2075	51.4
0- 60	3340	82.7
0- 90	4041	100.0
90-180	0	0.0
0-180	4041	100.0

EFFICACY = 80.2 lm/W

CIE TYPE - DIRECT

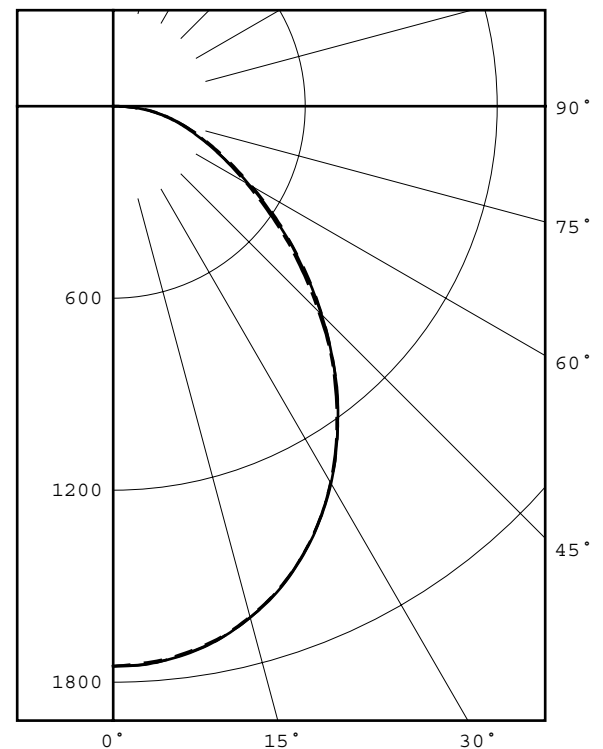
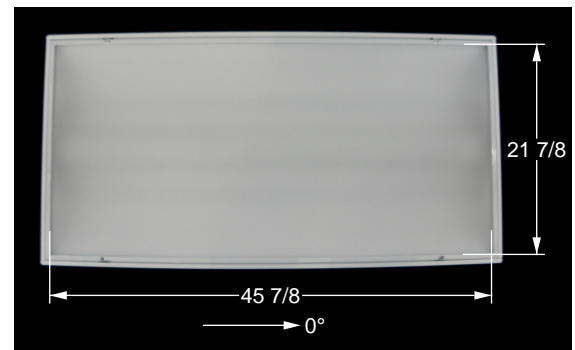
PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.16 1.16

LUMINOUS LENGTH : 45.875 21.875

LUMINANCE DATA IN CANDELA/SQ M

ANGLE	AVERAGE	AVERAGE	AVERAGE
IN DEG	0-DEG	45-DEG	90-DEG
45	2016.	2010.	1983.
55	1697.	1675.	1637.
65	1429.	1378.	1378.
75	1349.	1301.	1343.
85	1435.	1418.	1542.



LEGEND:

0-deg	-----
45-deg	=====
90-deg	-----

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
0.0	1750	1750	1750	1750	1750
2.5	1744	1751	1749	1747	1748
5.0	1737	1744	1741	1739	1741
7.5	1723	1730	1728	1726	1726
10.0	1705	1713	1710	1708	1709
12.5	1682	1688	1685	1683	1684
15.0	1651	1658	1654	1654	1654
17.5	1617	1622	1620	1620	1618
20.0	1576	1581	1579	1579	1578
22.5	1530	1534	1532	1532	1530
25.0	1478	1482	1480	1481	1479
27.5	1421	1424	1423	1423	1421
30.0	1359	1363	1361	1361	1358
32.5	1294	1295	1294	1294	1290
35.0	1223	1225	1223	1223	1218
37.5	1151	1151	1152	1149	1144
40.0	1076	1077	1076	1073	1070
42.5	999	1000	998	994	991
45.0	923	923	920	916	908
47.5	847	848	843	837	829
50.0	772	772	765	760	752
52.5	699	699	694	684	680
55.0	630	628	622	612	608
57.5	563	562	556	543	540
60.0	500	497	491	480	480
62.5	442	438	432	424	425
65.0	391	386	377	374	377
67.5	343	339	331	330	334
70.0	301	297	289	290	295
72.5	263	258	252	254	261
75.0	226	222	218	220	225
77.5	190	186	184	186	192
80.0	155	151	151	153	159
82.5	120	115	117	119	126
85.0	81	77	80	81	87
87.5	38	38	40	41	44
90.0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	42
5- 10	123
10- 15	200
15- 20	267
20- 25	321
25- 30	360
30- 35	380
35- 40	383
40- 45	369
45- 50	340
50- 55	301
55- 60	256
60- 65	211
65- 70	170
70- 75	134
75- 80	100
80- 85	64
85- 90	22

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	165
0- 20	631
0- 30	1312
0- 40	2075
0- 50	2784
0- 60	3340
0- 70	3721
0- 80	3955
0- 90	4041



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.



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