

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P95391

Luminaire Tested: **VFS-K-B40-3-LED-E1-NSR**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95391
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22802)
Test Lab: INNOVATION CENTER
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VFS-K-B40-3-LED-E1-NSR
Description: ARCHITECTURAL FLOOD LUMINAIRE
NARROW SYMMETRIC ROUND DISTRIBUTION
WITH 40 LED'S, 350mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

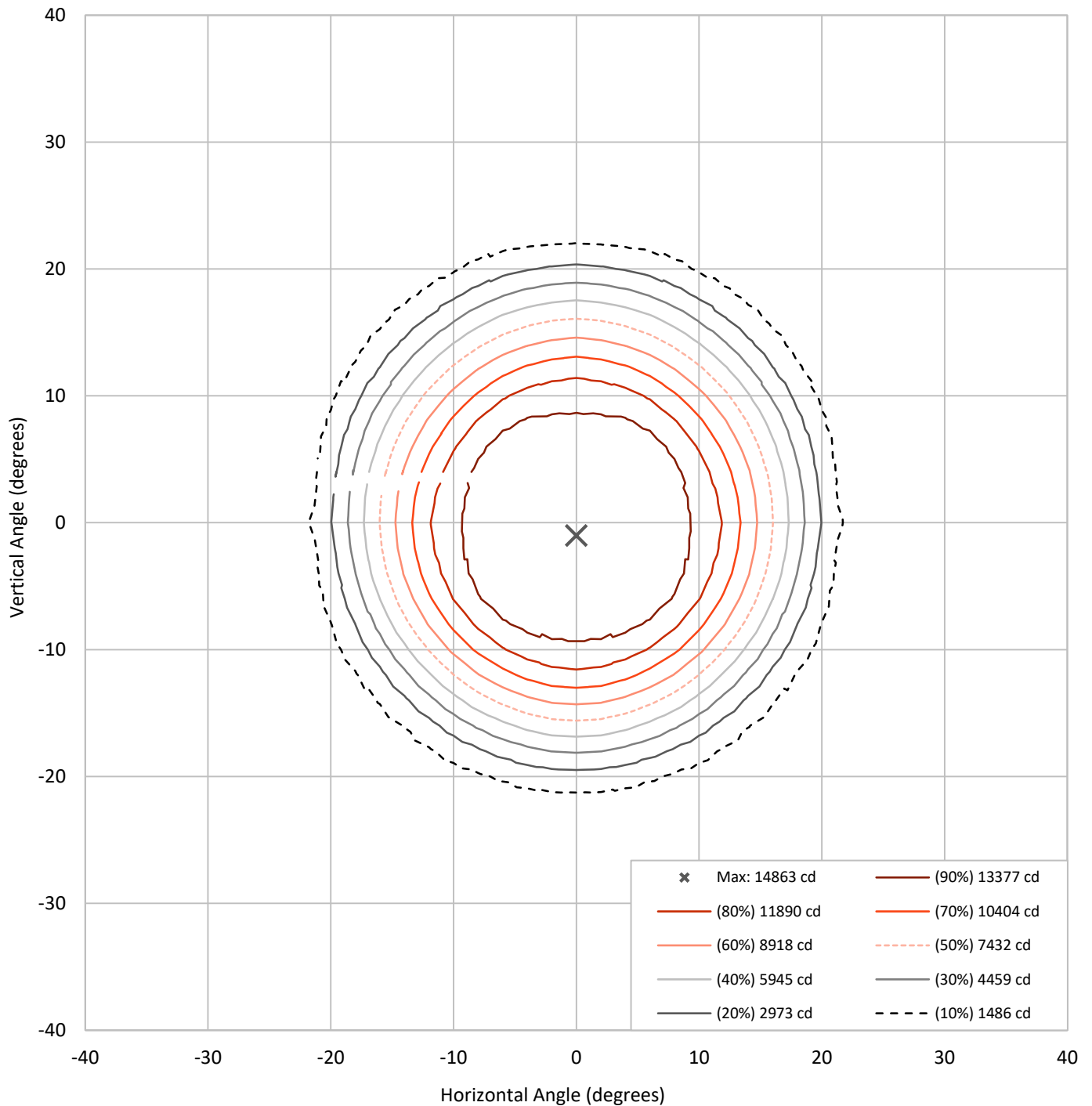
Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	3933.5 lumens	Max Intensity:	14863 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x -1°V
Efficacy:	87.4 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	32°H x 31.7°V	Field Angle (10%):	42.5°H x 43.3°V
Beam Lumens:	2789.5 lumens	Field Lumens:	3650.1 lumens
Beam Efficiency:	70.9%	Field Efficiency:	92.8%
Input Watts (W):	45		
Input Voltage (V):	NR		
Input Current (A _{in}):	NR		
Voltage Rise (V):	NR		
Power Factor:	NR		
Total Harmonic Distortion (THDi):	NR		
Frequency (hertz):	60		
Stabilization Time:	NR		
Operation Time:	NR		
Ambient Temperature (°C):	NR		
Test Distance:	25 FT		



REPORT NUMBER: P95391

CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

Iso-Candela Plot





REPORT NUMBER: P95391
 CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

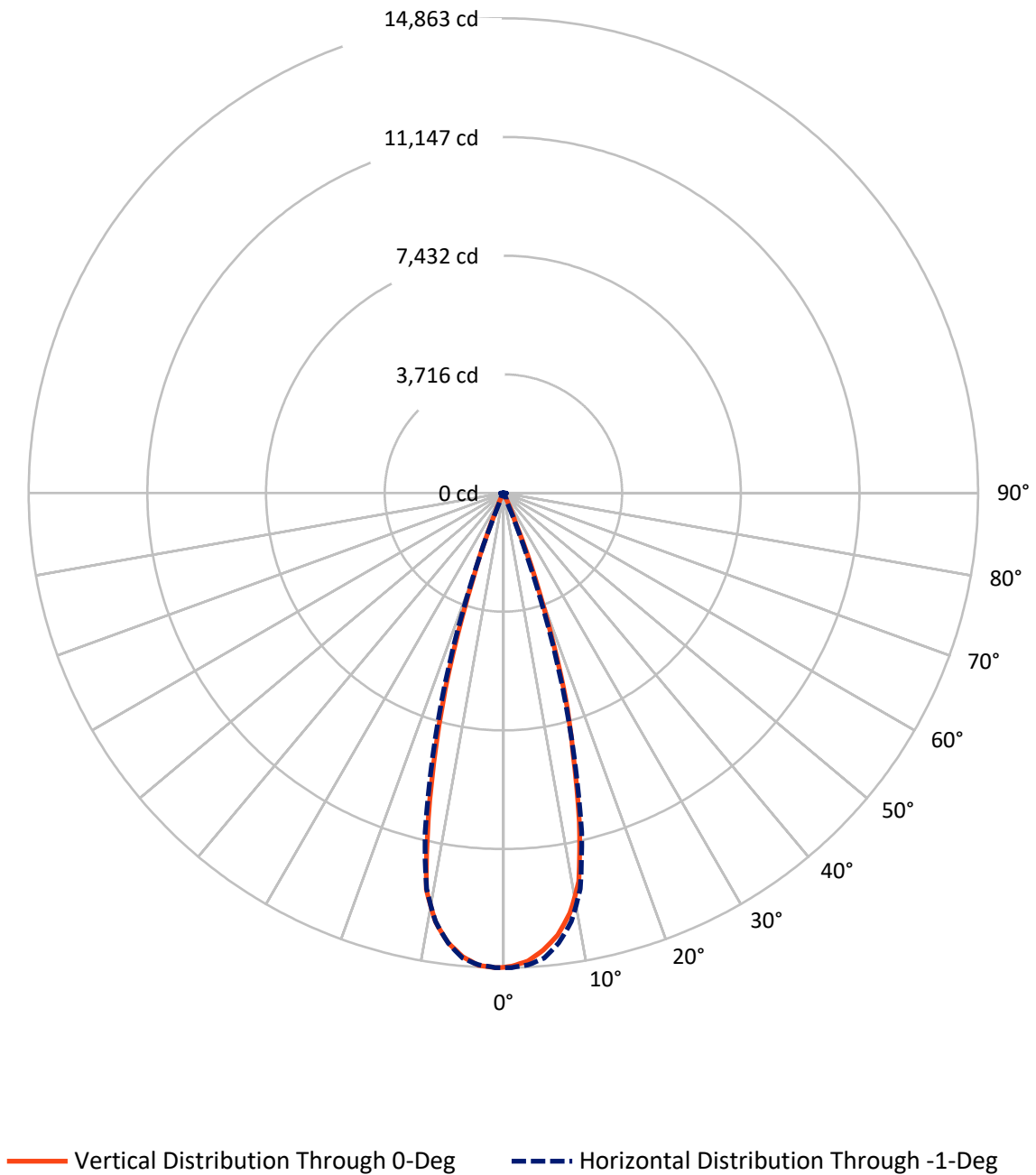
Lumen Table

90	1.8	4.8		5.2		3.3		1.4		3.3		5.2		4.8		1.8			
80	1.8	4.8		5.2		3.3		1.4		3.3		5.2		4.8		1.8			
70	1.9	1.0	0.9	0.5	0.3	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.5	0.9	1.0	1.9			
60		0.7	0.4	0.2	0.3	0.4	0.6	0.4	0.4	0.6	0.4	0.3	0.2	0.4	0.7				
50	1.6	0.5	0.2	0.2	0.3	0.5	0.6	0.5	0.5	0.6	0.5	0.3	0.2	0.2	0.5	1.6			
40		0.3	0.1	0.2	0.3	0.6	0.8	0.9	0.9	0.8	0.6	0.3	0.2	0.1	0.3				
30	1.3	0.2	0.1	0.1	0.3	0.8	4.2	18.8	18.8	4.2	0.8	0.3	0.1	0.1	0.2	1.3			
20		0.1	0.0	0.1	0.3	3.3	73.6	221.5	221.5	73.6	3.3	0.3	0.1	0.0	0.1				
10	1.2	0.1	0.0	0.0	0.3	11.9	215.7	414.0	414.0	215.7	11.9	0.3	0.0	0.0	0.1	1.2			
0		0.1	0.0	0.0	0.2	11.1	211.6	418.8	418.8	211.6	11.1	0.2	0.0	0.0	0.1				
-10	1.3	0.1	0.0	0.1	0.2	2.7	62.2	208.4	208.4	62.2	2.7	0.2	0.1	0.0	0.1	1.3			
-20		0.2	0.1	0.1	0.3	0.6	3.0	12.7	12.7	3.0	0.6	0.3	0.1	0.1	0.2				
-30	1.6	0.3	0.2	0.2	0.3	0.5	0.7	0.7	0.7	0.7	0.5	0.3	0.2	0.2	0.3	1.6			
-40		0.5	0.2	0.2	0.3	0.5	0.6	0.5	0.5	0.6	0.5	0.3	0.2	0.2	0.5				
-50	1.9	0.8	0.4	0.2	0.3	0.4	0.6	0.4	0.4	0.6	0.4	0.3	0.2	0.4	0.8	1.9			
-60		1.0	0.9	0.5	0.3	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.5	0.9	1.0				
-70	1.8	4.9		5.2		3.3		1.4		3.3		5.2		4.9		1.8			
-80		4.9		5.2		3.3		1.4		3.3		5.2		4.9					
-90	1.8	4.9		5.2		3.3		1.4		3.3		5.2		4.9		1.8			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

REPORT NUMBER: P95391

CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

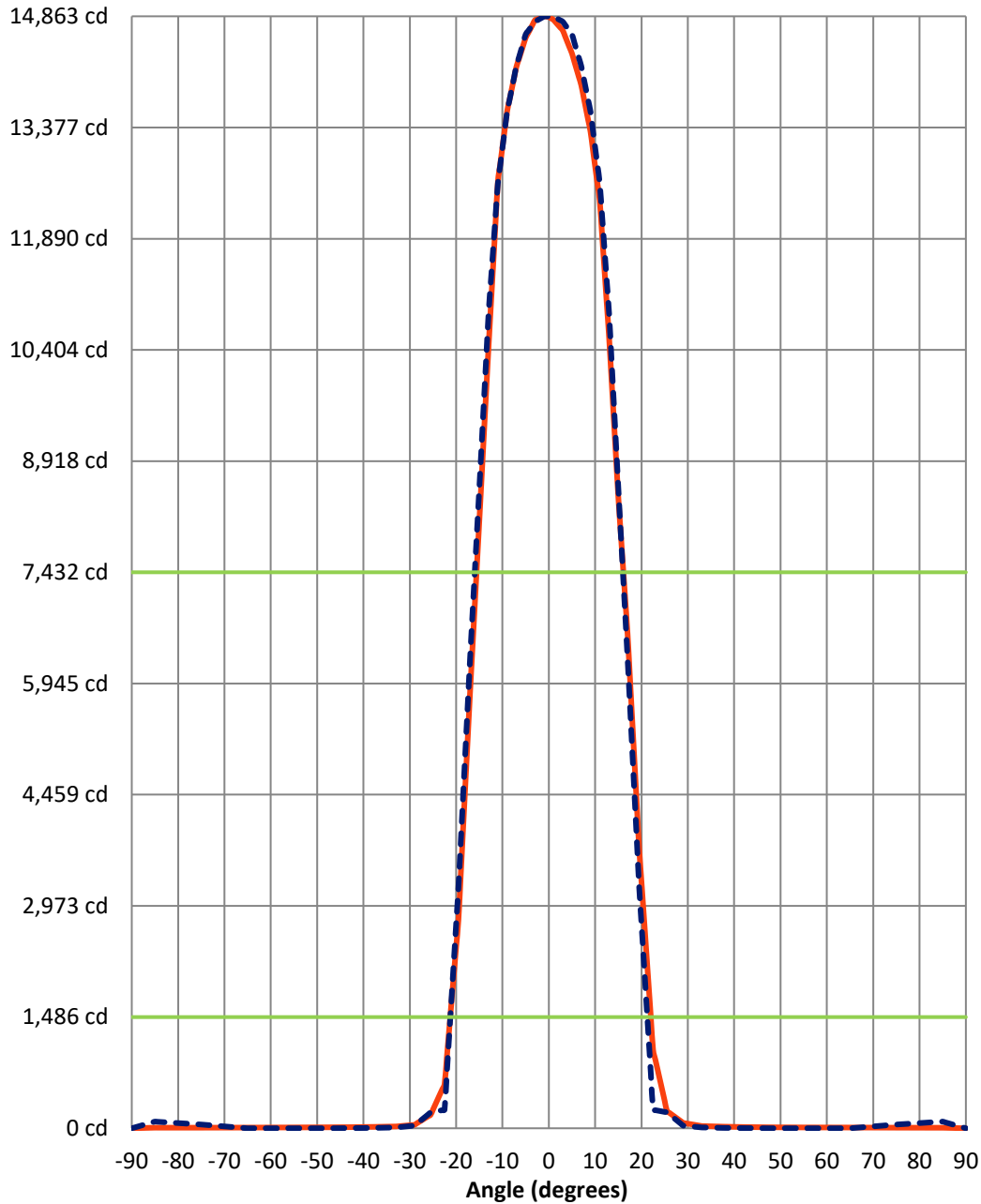
Luminous Intensity Polar Plot



REPORT NUMBER: P95391

CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

Luminous Intensity Plot



Beam:
H Angle: 32°
V Angle: 31.7°
Lumens: 2789.5
Efficiency: 70.9%

Field:
H Angle: 42.5°
V Angle: 43.3°
Lumens: 3650.1
Efficiency: 92.8%

Spill:
Lumens: 283.3
Efficiency: 7.2%

— Vertical Distribution through 0-Deg
- - Horizontal Distribution through -1-Deg



REPORT NUMBER: P95391

CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	7	11	16	12	11	10	13	26	41	56	68
75°	8	9	12	16	17	16	15	13	13	12	11
65°	10	10	11	13	16	18	18	18	17	16	15
55°	11	11	12	13	15	17	19	20	20	19	19
47.5°	13	13	14	15	16	18	19	20	21	21	21
42.5°	16	16	17	17	18	20	21	21	22	22	22
37.5°	22	21	22	22	23	23	24	24	24	23	23
33°	30	30	29	29	29	29	29	28	27	26	24
29°	72	73	68	64	56	49	42	38	34	31	28
25.5°	230	231	231	229	201	160	114	84	62	47	35
22.5°	1051	1065	926	822	635	498	315	217	162	111	62
19.5°	3739	3740	3420	3106	2474	1815	1183	696	410	224	139
17°	6603	6614	6225	5767	4922	3939	2891	1867	1050	544	218
15°	8431	8450	8116	7725	6886	5843	4593	3260	2012	1060	239
13°	10575	10569	10060	9550	8692	7627	6283	4777	3237	1851	515
11°	12388	12375	12032	11456	10430	9304	7937	6297	4555	2799	1141
9°	13319	13335	13223	12963	11971	10726	9385	7705	5820	3817	1692
7°	13942	13953	13934	13954	13282	11982	10525	8862	6896	4757	2259
5°	14365	14392	14444	14480	14062	13024	11490	9752	7764	5545	2740
3°	14675	14684	14664	14541	14154	13489	12248	10437	8335	6091	3124
1°	14816	14813	14736	14553	14168	13560	12599	10870	8571	6321	3355
0°	14853	14847	14755	14576	14180	13580	12643	10948	8596	6332	3341
-1°	14863	14861	14792	14621	14198	13586	12626	10898	8556	6273	3222
-3°	14811	14807	14853	14726	14231	13535	12403	10476	8273	5935	2931
-5°	14576	14577	14688	14739	14202	13231	11684	9758	7620	5250	2485
-7°	14187	14180	14221	14177	13462	12211	10622	8787	6603	4337	1970
-9°	13594	13579	13588	13076	12097	10887	9321	7393	5322	3331	1408
-11°	12644	12636	12234	11437	10498	9277	7550	5734	3976	2336	901
-13°	10453	10503	10101	9372	8448	7191	5655	4144	2654	1444	245
-15°	8116	8155	7821	7151	6277	5180	3852	2599	1512	772	230
-17°	5818	5847	5506	4850	4056	3185	2181	1340	727	334	195
-19.5°	2789	2824	2581	2169	1697	1236	770	467	240	188	100
-22.5°	589	604	558	480	410	344	213	166	119	77	46
-25.5°	181	184	174	154	128	104	72	57	45	36	30
-29°	46	47	46	43	39	37	34	31	29	27	25
-33°	24	24	24	25	25	25	25	25	25	24	23
-37.5°	19	19	19	20	20	21	22	23	23	23	23
-42.5°	15	15	16	16	18	19	20	21	22	22	22
-47.5°	13	13	13	14	16	18	19	20	21	21	21
-55°	11	11	12	13	15	17	18	19	20	19	19
-65°	9	10	11	13	16	18	18	18	17	16	15
-75°	8	9	12	16	17	16	15	13	13	12	11
-85°	8	11	16	12	11	10	13	26	41	56	68
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P95391

CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

CANDELA DISTRIBUTION (continued):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0	0	0	0	0	0	0	0	0	0	0
85°	79	87	91	93	95	97	98	99	99	100	100
75°	11	10	10	22	37	56	70	87	94	98	100
65°	14	13	12	11	10	11	23	51	82	95	99
55°	17	15	14	12	11	10	9	20	60	90	99
47.5°	19	18	16	13	12	10	9	8	43	86	99
42.5°	20	19	16	14	12	10	9	8	33	81	98
37.5°	21	19	17	14	12	10	9	7	24	77	98
33°	22	20	17	14	12	10	8	6	20	72	97
29°	24	21	17	14	12	9	7	5	16	68	96
25.5°	27	22	18	14	11	8	6	4	12	65	96
22.5°	34	25	19	14	10	7	5	3	9	62	95
19.5°	52	29	20	14	9	6	4	2	6	59	94
17°	102	36	21	13	8	5	3	1	4	58	93
15°	160	48	22	13	8	5	3	1	2	56	93
13°	216	71	23	13	7	4	2	0	1	55	92
11°	234	100	25	12	6	4	2	0	0	54	92
9°	241	131	27	12	6	3	1	0	0	53	91
7°	246	161	29	11	5	3	1	0	0	52	91
5°	247	187	32	11	5	2	0	0	0	51	90
3°	248	206	34	11	5	2	0	0	0	51	90
1°	248	216	36	11	5	2	0	0	0	50	90
0°	837	216	36	11	5	2	0	0	0	50	90
-1°	248	212	35	11	5	2	0	0	0	50	89
-3°	247	198	32	11	5	2	0	0	0	50	90
-5°	246	176	29	10	5	2	0	0	0	51	90
-7°	244	146	26	10	5	2	0	0	0	51	90
-9°	238	113	24	10	5	3	1	0	0	52	90
-11°	229	82	22	11	6	3	1	0	0	53	91
-13°	195	56	20	11	6	4	2	0	0	54	91
-15°	129	39	19	11	6	4	2	0	1	55	92
-17°	77	30	18	11	7	4	3	1	2	56	92
-19.5°	41	24	17	11	7	5	3	1	4	58	93
-22.5°	28	21	16	12	9	6	4	2	7	61	94
-25.5°	24	20	16	13	10	7	5	4	11	64	95
-29°	22	19	16	14	11	8	7	5	15	68	96
-33°	22	20	17	14	12	10	8	6	20	72	97
-37.5°	21	20	17	15	12	10	9	8	26	77	98
-42.5°	21	19	17	14	12	11	9	9	34	82	98
-47.5°	20	18	16	14	12	11	9	9	44	87	99
-55°	17	16	14	13	12	10	10	21	62	91	99
-65°	14	13	12	11	10	11	24	52	83	95	99
-75°	11	10	11	22	37	57	71	88	95	99	100
-85°	79	87	91	93	96	97	98	99	99	100	100
-90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P95391

CATALOG NUMBER: VFS-K-B40-3-LED-E1-NSR

CANDELA DISTRIBUTION (continued):

	90°
90°	0
85°	0
75°	0
65°	0
55°	0
47.5°	0
42.5°	0
37.5°	0
33°	0
29°	0
25.5°	0
22.5°	0
19.5°	0
17°	0
15°	0
13°	0
11°	0
9°	0
7°	0
5°	0
3°	0
1°	0
0°	0
-1°	0
-3°	0
-5°	0
-7°	0
-9°	0
-11°	0
-13°	0
-15°	0
-17°	0
-19.5°	0
-22.5°	0
-25.5°	0
-29°	0
-33°	0
-37.5°	0
-42.5°	0
-47.5°	0
-55°	0
-65°	0
-75°	0
-85°	0
-90°	0

(END OF REPORT)