

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: LUMARK

Report Number: P143623

Luminaire Tested: **LDRL-5MQ-F01-E-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143623
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5MQ-F01-E-8030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2165.2 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

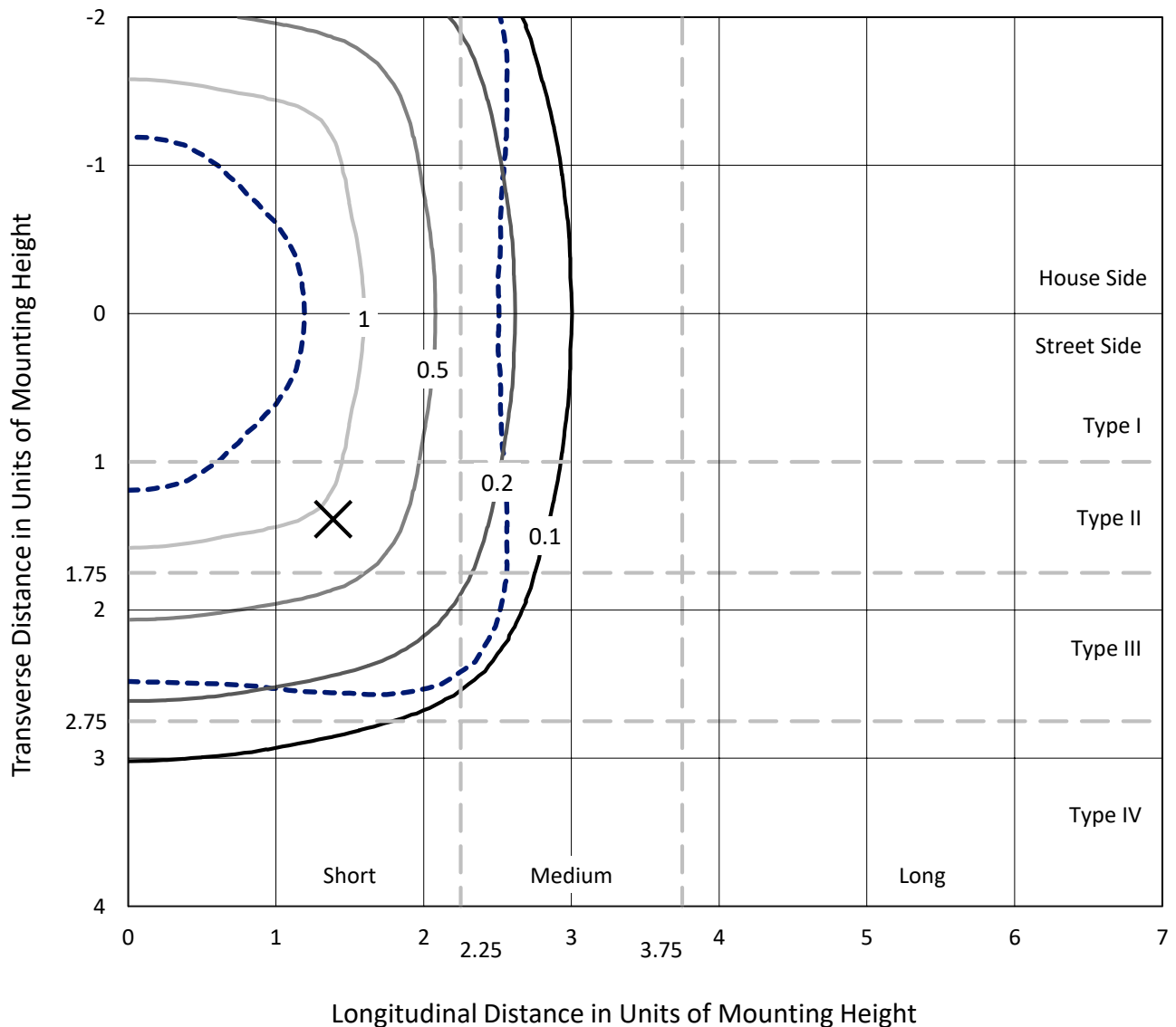
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143623
 CATALOG NUMBER: LDRL-5MQ-F01-E-8030

Iso-Footcandle Lines of Horizontal Illumination

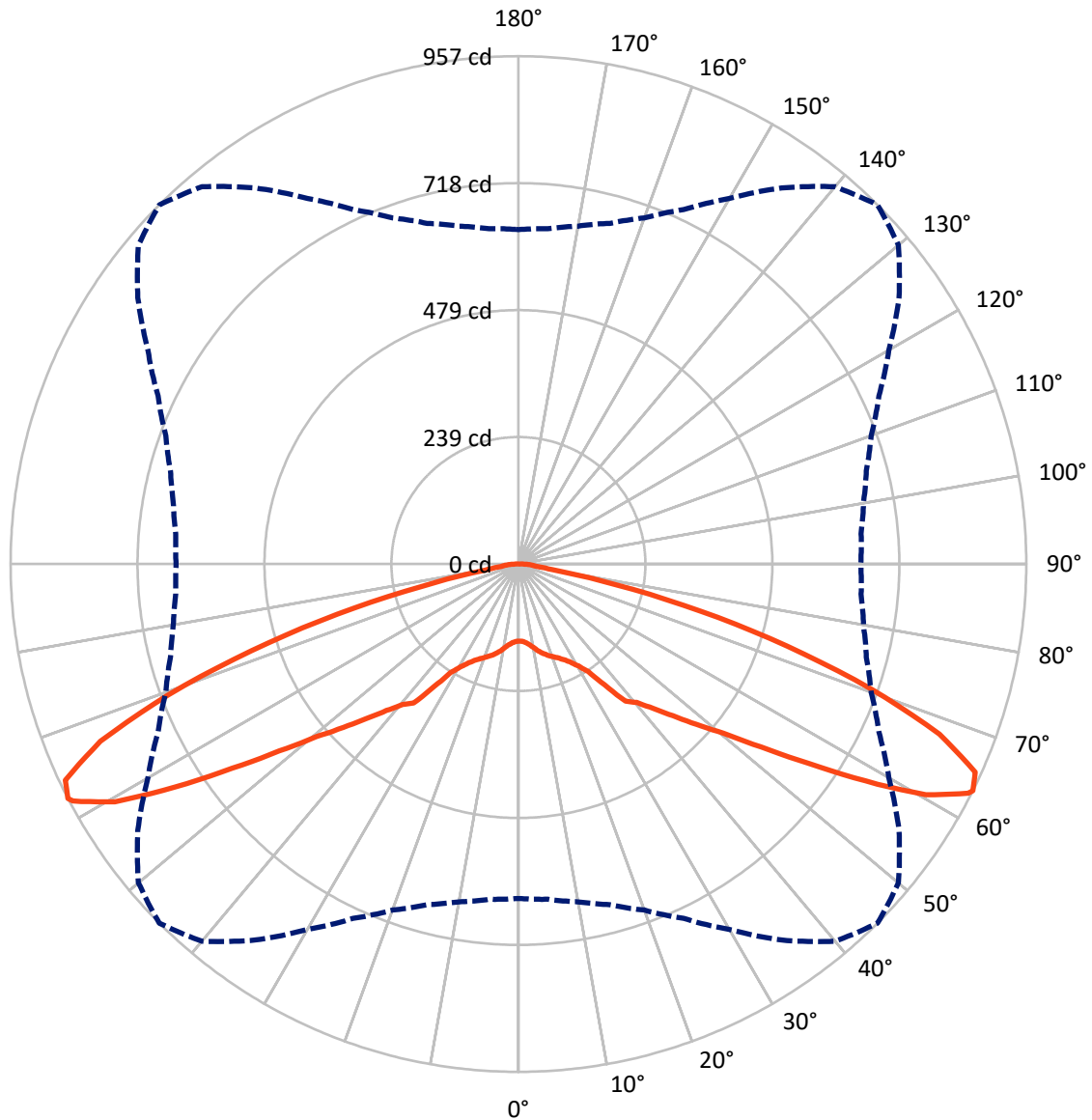
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P143623
CATALOG NUMBER: LDRL-5MQ-F01-E-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P143623

CATALOG NUMBER: LDRL-5MQ-F01-E-8030

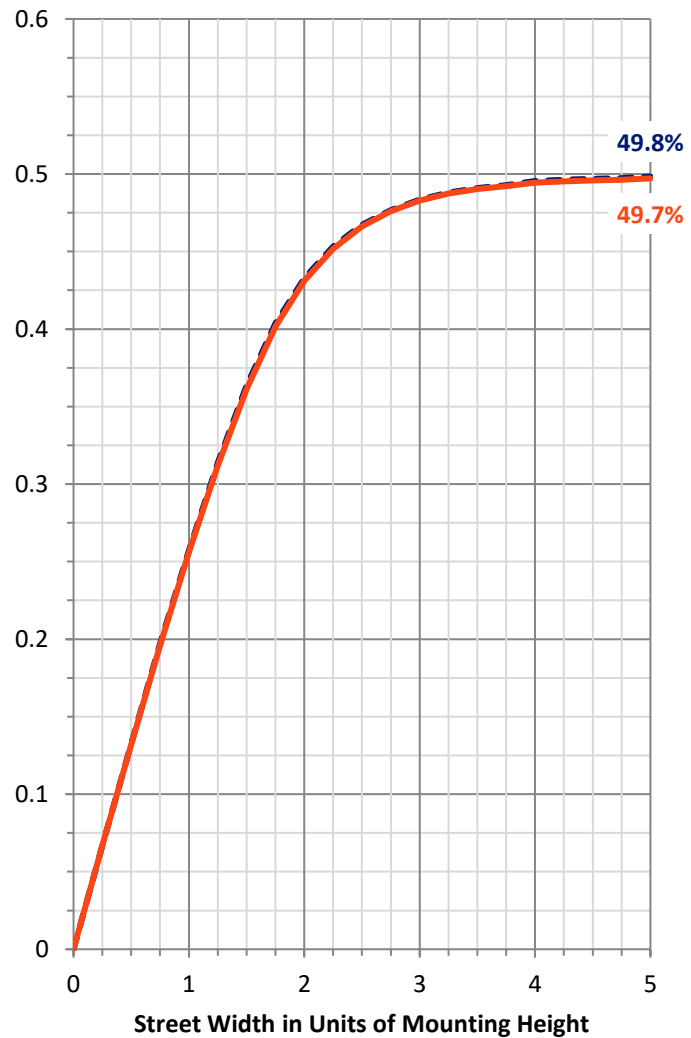
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1082.6	0.0	1082.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1082.6	0.0	1082.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	2165.2	0.0	2165.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.6	0.7
10°-20°	50.0	2.3
20°-30°	95.5	4.4
30°-40°	181.9	8.4
40°-50°	313.2	14.5
50°-60°	559.7	25.8
60°-70°	681.7	31.5
70°-80°	242.8	11.2
80°-90°	25.7	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2165.2	100.0
0°-180°	2165.2	100.0



--- HS — SS

REPORT NUMBER: P143623

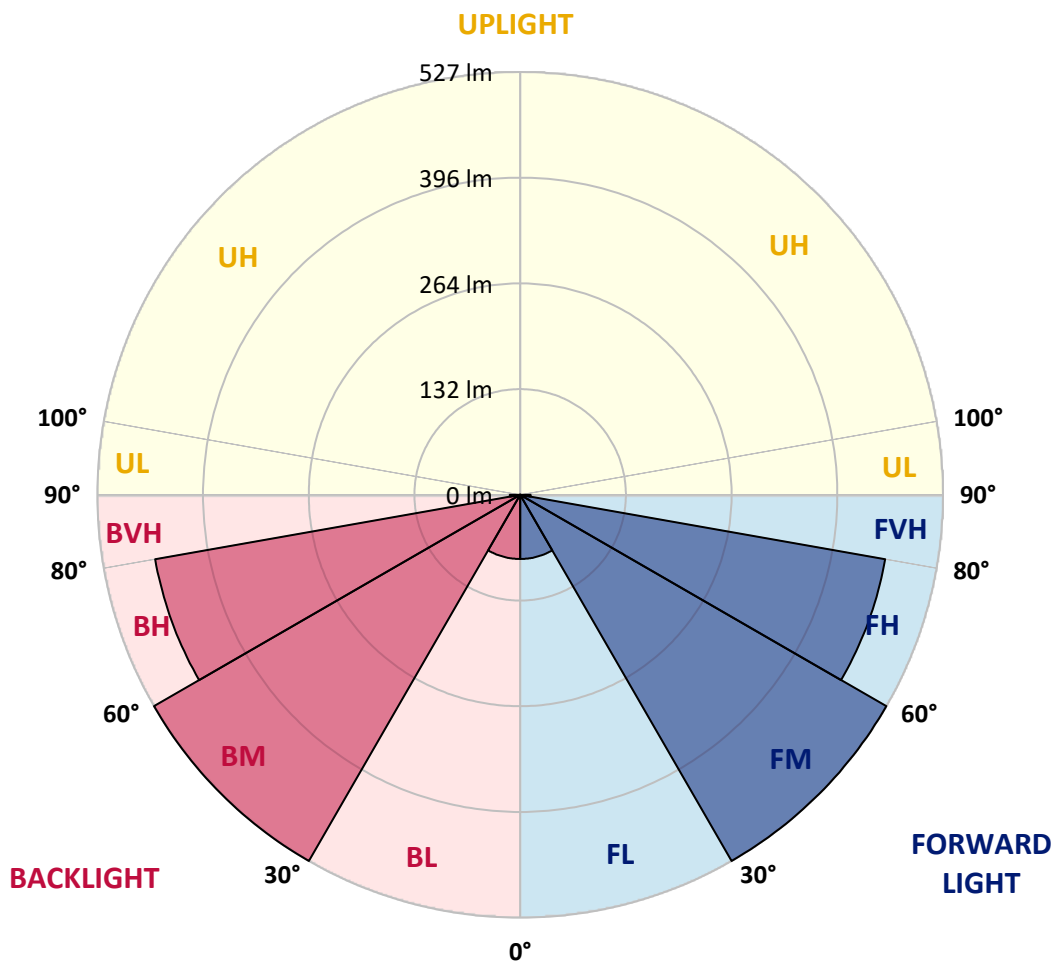
CATALOG NUMBER: LDRL-5MQ-F01-E-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	80.1	3.7			
FM (30°-60°)	527.4	24.4			
FH (60°-80°)	462.3	21.4			G0/660
FVH (80°-90°)	12.9	0.6			G1/100
BL (0°-30°)	80.1	3.7	B0/110		
BM (30°-60°)	527.4	24.4	B1/1000		
BH (60°-80°)	462.3	21.4	B1/500		G0/660
BVH (80°-90°)	12.9	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type V Short





REPORT NUMBER: P143623

CATALOG NUMBER: LDRL-5MQ-F01-E-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	145.3	145.3	145.3	145.3	145.3	145.3	145.3	145.3	145.3	145.3	145.3
2.5°	146.5	146.3	146.5	146.2	146.2	146.0	146.0	146.0	145.8	146.0	145.8
5°	149.5	149.4	149.5	149.2	149.2	149.0	149.0	149.0	148.7	149.0	148.8
7.5°	154.8	155.1	154.8	154.5	154.5	154.3	154.1	154.1	154.0	153.8	154.1
10°	162.2	162.5	162.1	161.8	161.6	161.5	161.2	161.1	161.1	160.5	160.7
12.5°	170.0	170.0	169.6	169.4	169.4	169.2	168.6	168.5	168.5	168.2	167.9
15°	177.0	177.0	176.7	176.1	176.3	175.9	175.4	175.2	175.2	174.9	174.6
17.5°	183.4	183.4	183.0	182.4	182.1	182.0	181.4	181.2	181.2	180.9	180.6
20°	189.8	190.1	189.4	188.8	188.3	187.7	187.1	186.9	186.4	186.6	186.4
22.5°	197.5	197.6	196.5	195.8	194.7	194.0	193.1	192.9	192.3	192.3	192.6
25°	207.2	207.1	205.8	204.6	203.3	201.9	200.7	200.4	199.8	199.7	199.8
27.5°	220.0	219.9	218.4	216.7	215.0	212.9	211.4	210.6	210.1	209.6	209.9
30°	235.8	236.1	234.2	232.3	230.2	227.7	225.7	224.6	223.8	223.2	223.5
32.5°	267.8	267.5	264.8	260.6	256.1	250.3	245.5	243.6	242.0	241.5	241.9
35°	300.0	299.7	298.6	297.4	296.3	292.5	289.0	285.0	281.6	279.5	280.1
37.5°	315.2	315.2	314.4	314.1	314.1	316.3	319.1	324.1	328.0	328.3	327.0
40°	338.9	338.9	337.5	336.8	336.4	337.1	338.9	340.7	342.7	343.1	341.7
42.5°	366.8	365.5	364.5	363.1	363.0	363.7	365.6	367.9	369.8	371.5	368.6
45°	396.9	395.7	394.8	393.9	394.5	396.3	399.0	402.9	405.6	408.1	405.8
47.5°	430.4	428.1	429.0	428.2	429.6	433.2	438.0	443.8	446.7	451.2	447.4
50°	472.2	472.8	472.2	472.2	473.9	478.7	485.6	493.6	498.6	501.1	498.9
52.5°	534.4	532.7	529.0	530.1	532.3	539.8	548.9	560.0	566.4	572.4	565.5
55°	602.4	602.7	602.1	603.7	608.0	615.6	627.1	643.9	652.0	662.5	654.1
57.5°	658.7	660.6	664.0	668.6	677.9	690.7	713.2	739.0	760.4	771.7	758.6
60°	676.9	678.9	687.0	699.8	717.4	743.6	779.9	824.1	862.7	882.8	865.6
62.5°	641.8	645.5	657.4	675.1	704.1	745.1	799.2	864.5	924.0	951.5	930.7
63°	630.4	634.4	646.7	664.7	694.2	737.0	795.4	865.3	928.3	957.3	934.9
65°	579.7	582.3	595.3	615.8	648.7	693.3	758.2	841.0	912.7	946.3	922.5
67.5°	499.8	503.3	515.2	532.9	564.8	612.0	675.8	758.3	829.0	855.9	835.5
70°	400.9	404.8	414.6	431.0	456.1	499.8	554.5	631.5	684.6	705.7	683.9
72.5°	281.8	283.4	290.5	307.8	326.6	361.5	404.8	464.7	515.7	529.5	508.6
75°	119.3	119.4	128.8	139.8	163.3	198.0	235.8	287.3	333.2	354.6	328.2
77.5°	38.2	38.6	41.2	45.3	53.1	68.6	96.4	124.7	166.8	187.1	162.3
80°	31.9	32.5	33.6	34.4	35.0	35.8	39.0	43.5	54.8	63.7	51.4
82.5°	27.5	28.4	30.9	31.9	32.5	32.7	33.2	33.0	32.3	32.0	32.2
85°	20.9	23.3	26.1	28.3	28.6	28.7	29.5	29.8	27.6	25.4	27.6
87.5°	9.1	11.7	18.0	19.9	19.5	18.1	19.4	20.5	18.7	13.7	18.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143623

CATALOG NUMBER: LDRL-5MQ-F01-E-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	145.3	145.3	145.3	145.3	145.3	145.3	145.3	145.3
2.5°	145.9	146.2	146.2	146.2	146.2	146.3	146.5	146.3
5°	149.0	149.2	149.1	149.2	149.2	149.4	149.5	149.4
7.5°	154.3	154.3	154.3	154.5	154.5	154.8	154.8	154.8
10°	160.8	160.7	160.7	160.9	161.2	161.4	161.6	161.5
12.5°	167.9	167.6	167.8	168.1	168.3	168.5	168.7	168.6
15°	174.3	174.2	174.2	174.6	174.7	174.9	175.4	175.4
17.5°	180.5	180.5	180.5	181.0	181.2	181.7	182.1	182.1
20°	186.6	186.6	186.6	187.1	187.6	188.4	189.2	189.1
22.5°	192.9	193.0	193.3	193.8	194.8	196.1	196.8	196.8
25°	200.7	201.2	201.8	202.6	204.0	205.7	206.8	207.2
27.5°	210.7	211.9	213.3	214.6	216.1	218.2	219.8	220.0
30°	224.3	226.2	228.4	230.1	232.0	234.4	236.2	237.2
32.5°	243.7	248.2	251.1	257.1	260.7	264.8	268.1	269.5
35°	283.6	288.0	291.9	296.0	296.8	298.2	300.0	300.4
37.5°	323.0	319.4	315.9	315.8	314.8	315.1	315.6	316.3
40°	340.1	339.0	337.2	337.9	338.1	338.1	339.2	339.3
42.5°	367.7	365.1	363.0	364.7	365.0	365.2	366.3	367.6
45°	402.9	398.8	396.2	395.2	396.2	395.9	397.4	397.7
47.5°	443.0	437.7	431.7	429.7	429.2	427.9	430.6	430.3
50°	492.2	483.7	476.4	473.6	472.2	471.6	472.2	472.2
52.5°	554.5	546.0	536.1	532.9	531.7	533.3	531.1	533.4
55°	640.2	626.4	612.8	608.5	607.8	607.1	607.4	608.4
57.5°	736.6	712.1	693.9	683.4	676.5	673.2	669.6	669.0
60°	829.7	785.1	750.7	727.3	710.7	698.1	691.7	689.5
62.5°	874.5	809.3	755.8	716.0	691.3	670.8	659.5	656.6
63°	875.8	806.3	749.5	707.5	678.8	660.4	648.4	645.3
65°	852.5	773.4	706.9	660.6	630.3	611.0	596.3	593.1
67.5°	767.8	691.0	623.0	576.1	543.2	527.7	511.4	511.0
70°	630.1	561.6	504.3	461.1	433.6	418.3	401.7	402.2
72.5°	460.7	399.8	360.4	326.6	297.6	283.2	267.5	269.1
75°	277.3	223.0	187.4	158.2	128.3	110.5	98.5	91.7
77.5°	118.6	81.1	58.2	46.3	39.0	36.1	34.7	34.3
80°	41.2	36.5	34.4	33.9	33.4	32.9	31.9	30.9
82.5°	33.4	33.4	32.3	32.2	30.9	30.0	27.5	26.2
85°	29.7	29.1	28.1	27.7	27.5	25.4	22.2	20.5
87.5°	19.6	18.3	17.4	17.8	17.3	15.5	9.5	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)