

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: P143625

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143625
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
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (7) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2565.5 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

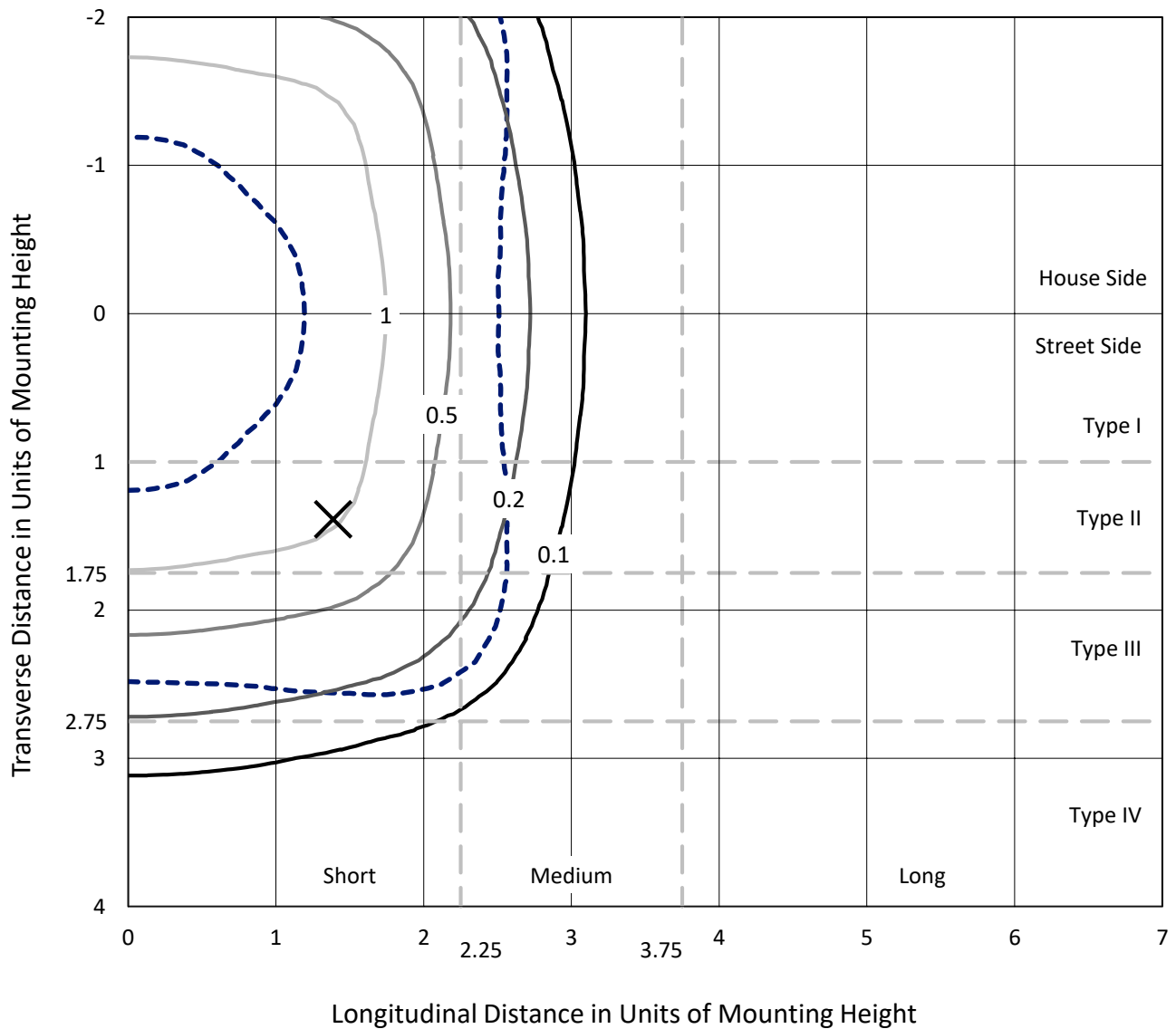
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

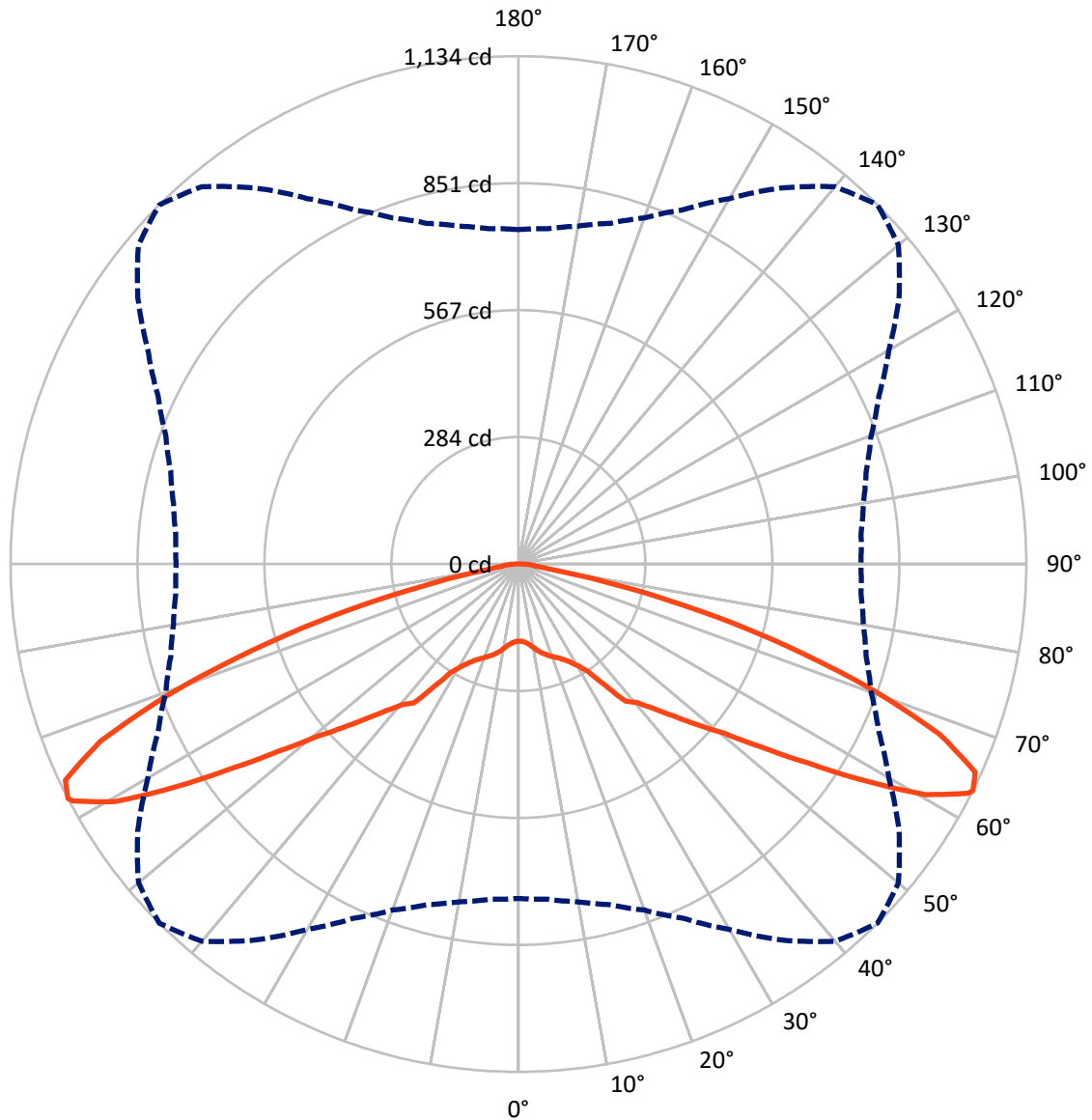
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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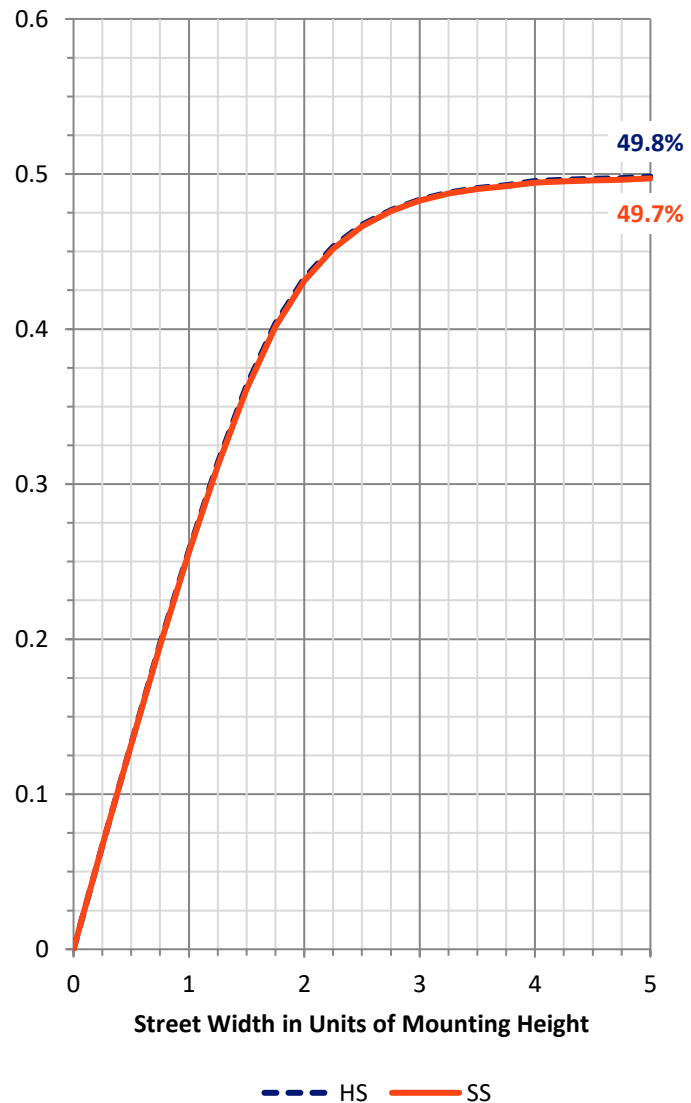
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1282.7	0.0	1282.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1282.7	0.0	1282.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	2565.5	0.0	2565.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.3	0.7
10°-20°	59.2	2.3
20°-30°	113.1	4.4
30°-40°	215.5	8.4
40°-50°	371.1	14.5
50°-60°	663.2	25.8
60°-70°	807.7	31.5
70°-80°	287.7	11.2
80°-90°	30.5	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°	2565.5	100.0
0°-180°	2565.5	100.0



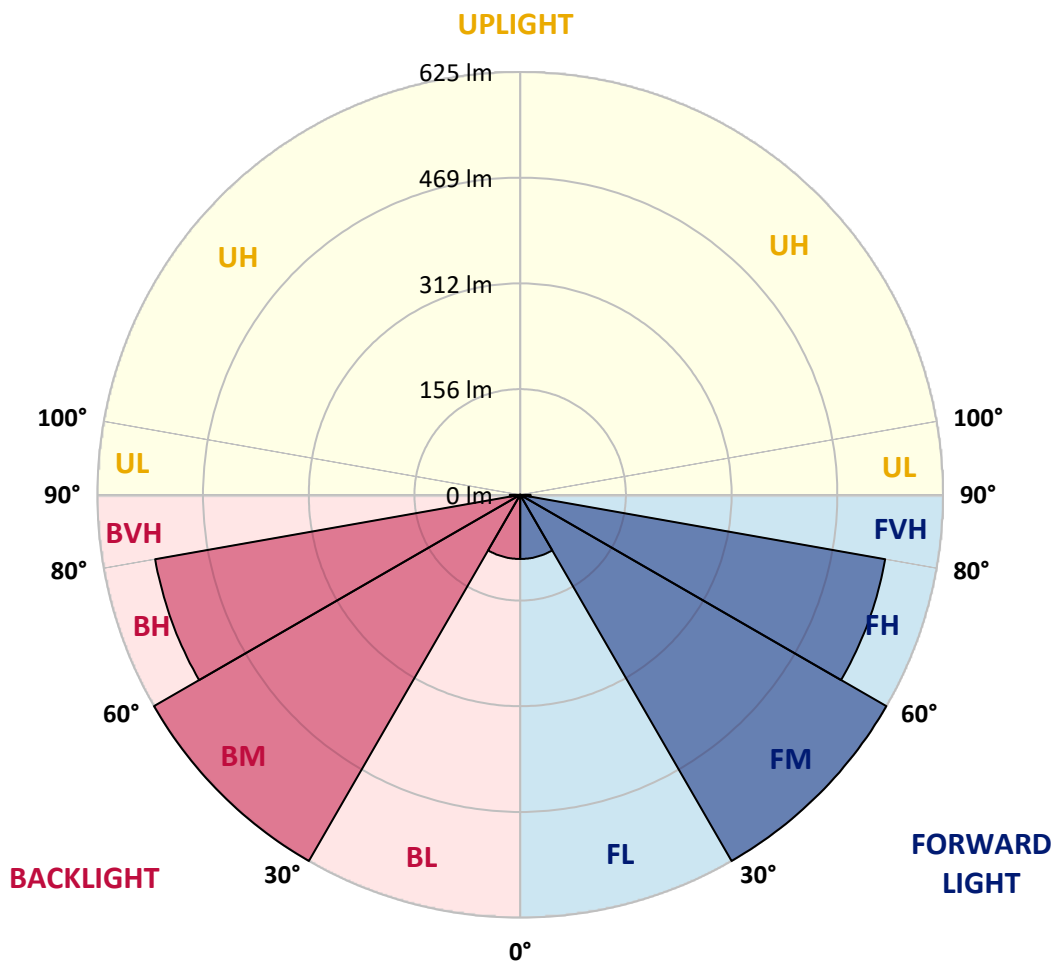
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	94.8	3.7			
FM (30°-60°)	624.9	24.4			
FH (60°-80°)	547.7	21.4			G0/660
FVH (80°-90°)	15.3	0.6			G1/100
BL (0°-30°)	94.8	3.7	B0/110		
BM (30°-60°)	624.9	24.4	B1/1000		
BH (60°-80°)	547.7	21.4	B2/1000		G0/660
BVH (80°-90°)	15.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2
2.5°	173.5	173.4	173.5	173.2	173.2	173.0	173.0	173.0	172.7	173.0	172.7
5°	177.2	177.0	177.2	176.8	176.8	176.5	176.5	176.5	176.2	176.5	176.3
7.5°	183.4	183.8	183.4	183.1	183.1	182.8	182.6	182.6	182.4	182.3	182.6
10°	192.2	192.5	192.0	191.7	191.5	191.4	191.0	190.9	190.9	190.2	190.4
12.5°	201.4	201.4	200.9	200.8	200.8	200.4	199.8	199.6	199.6	199.3	199.0
15°	209.7	209.7	209.4	208.7	208.9	208.4	207.9	207.5	207.5	207.2	206.9
17.5°	217.3	217.3	216.8	216.1	215.8	215.6	215.0	214.6	214.6	214.3	214.0
20°	224.9	225.2	224.4	223.7	223.1	222.4	221.7	221.4	220.9	221.1	220.9
22.5°	234.0	234.1	232.8	232.0	230.7	229.8	228.8	228.5	227.8	227.8	228.2
25°	245.5	245.3	243.9	242.4	240.9	239.2	237.8	237.4	236.8	236.6	236.8
27.5°	260.7	260.5	258.7	256.7	254.8	252.3	250.5	249.5	249.0	248.3	248.6
30°	279.4	279.7	277.5	275.2	272.8	269.8	267.5	266.1	265.2	264.5	264.8
32.5°	317.3	317.0	313.7	308.7	303.5	296.5	290.9	288.6	286.8	286.1	286.6
35°	355.5	355.1	353.8	352.3	351.0	346.6	342.4	337.6	333.7	331.2	331.9
37.5°	373.5	373.5	372.5	372.1	372.1	374.8	378.1	384.0	388.7	389.0	387.5
40°	401.5	401.5	399.9	399.1	398.6	399.4	401.5	403.7	406.0	406.5	404.8
42.5°	434.6	433.1	431.9	430.3	430.1	430.9	433.2	435.9	438.2	440.2	436.7
45°	470.2	468.9	467.7	466.8	467.4	469.6	472.7	477.3	480.6	483.6	480.8
47.5°	510.0	507.2	508.4	507.4	509.0	513.3	518.9	525.9	529.3	534.6	530.2
50°	559.5	560.2	559.5	559.5	561.5	567.1	575.4	584.8	590.7	593.7	591.1
52.5°	633.2	631.2	626.7	628.1	630.7	639.6	650.3	663.6	671.2	678.3	670.0
55°	713.7	714.1	713.4	715.2	720.4	729.4	743.0	763.0	772.5	784.9	775.0
57.5°	780.5	782.8	786.7	792.2	803.2	818.4	845.0	875.6	901.0	914.4	898.8
60°	802.1	804.4	814.0	829.2	850.0	881.0	924.1	976.4	1022.2	1045.9	1025.6
62.5°	760.5	764.8	779.0	799.9	834.3	882.8	946.9	1024.3	1094.8	1127.3	1102.7
63°	746.9	751.7	766.3	787.6	822.6	873.2	942.4	1025.3	1099.9	1134.3	1107.7
65°	686.8	690.0	705.3	729.6	768.6	821.4	898.3	996.4	1081.4	1121.2	1093.0
67.5°	592.2	596.4	610.4	631.4	669.2	725.1	800.8	898.5	982.2	1014.1	990.0
70°	475.0	479.6	491.2	510.7	540.4	592.2	657.0	748.3	811.2	836.1	810.3
72.5°	333.8	335.8	344.2	364.7	387.0	428.3	479.6	550.6	611.1	627.4	602.6
75°	141.3	141.5	152.6	165.6	193.5	234.6	279.4	340.4	394.8	420.2	388.8
77.5°	45.2	45.7	48.9	53.7	62.9	81.2	114.3	147.8	197.6	221.7	192.3
80°	37.8	38.5	39.8	40.8	41.4	42.4	46.2	51.5	64.9	75.5	60.9
82.5°	32.5	33.7	36.7	37.8	38.5	38.8	39.3	39.1	38.3	38.0	38.1
85°	24.8	27.6	30.9	33.5	33.8	34.0	35.0	35.3	32.7	30.0	32.7
87.5°	10.7	13.9	21.3	23.6	23.1	21.5	22.9	24.3	22.1	16.2	21.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2
2.5°	172.9	173.2	173.2	173.2	173.2	173.4	173.5	173.4
5°	176.5	176.8	176.7	176.8	176.8	177.0	177.2	177.0
7.5°	182.8	182.8	182.8	183.1	183.1	183.4	183.4	183.4
10°	190.5	190.4	190.4	190.7	191.0	191.2	191.5	191.4
12.5°	199.0	198.6	198.8	199.1	199.4	199.6	199.9	199.8
15°	206.5	206.4	206.4	206.9	207.0	207.2	207.9	207.9
17.5°	213.8	213.8	213.8	214.5	214.6	215.3	215.8	215.8
20°	221.1	221.1	221.1	221.7	222.2	223.2	224.2	224.0
22.5°	228.5	228.7	229.0	229.7	230.8	232.3	233.1	233.1
25°	237.8	238.4	239.1	240.1	241.7	243.7	245.0	245.5
27.5°	249.6	251.1	252.8	254.3	256.1	258.6	260.4	260.7
30°	265.8	268.0	270.6	272.6	274.9	277.7	279.9	281.0
32.5°	288.8	294.1	297.5	304.6	308.9	313.7	317.7	319.3
35°	336.0	341.3	345.9	350.7	351.7	353.3	355.5	356.0
37.5°	382.7	378.4	374.3	374.1	373.0	373.3	374.0	374.8
40°	403.0	401.7	399.6	400.4	400.5	400.5	401.9	402.0
42.5°	435.7	432.6	430.1	432.1	432.4	432.7	434.1	435.5
45°	477.3	472.5	469.4	468.2	469.4	469.1	470.9	471.2
47.5°	524.9	518.6	511.5	509.2	508.5	507.0	510.2	509.8
50°	583.2	573.1	564.5	561.2	559.5	558.7	559.5	559.5
52.5°	657.0	646.9	635.2	631.4	630.0	631.9	629.2	632.0
55°	758.5	742.1	726.1	721.0	720.2	719.4	719.7	720.8
57.5°	872.7	843.7	822.2	809.7	801.6	797.6	793.3	792.7
60°	983.0	930.2	889.4	861.7	842.0	827.2	819.6	816.9
62.5°	1036.2	958.9	895.5	848.3	819.1	794.8	781.4	778.0
63°	1037.7	955.3	888.1	838.2	804.2	782.4	768.2	764.6
65°	1010.1	916.3	837.6	782.8	746.8	724.0	706.5	702.7
67.5°	909.7	818.8	738.2	682.5	643.6	625.3	605.9	605.4
70°	746.6	665.4	597.5	546.3	513.8	495.6	476.0	476.5
72.5°	545.8	473.7	427.0	387.0	352.7	335.5	317.0	318.8
75°	328.6	264.2	222.1	187.4	152.1	130.9	116.7	108.6
77.5°	140.5	96.1	69.0	54.8	46.2	42.8	41.1	40.6
80°	48.9	43.3	40.8	40.1	39.6	39.0	37.8	36.7
82.5°	39.6	39.6	38.3	38.1	36.7	35.5	32.5	31.0
85°	35.2	34.5	33.4	32.9	32.5	30.0	26.3	24.3
87.5°	23.3	21.6	20.6	21.1	20.5	18.3	11.2	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)