

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: P143624

Luminaire Tested: **LDRL-5MQ-F01-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143624
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-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2343.2 lumens
Efficiency: N/A
Efficacy: 90.5 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

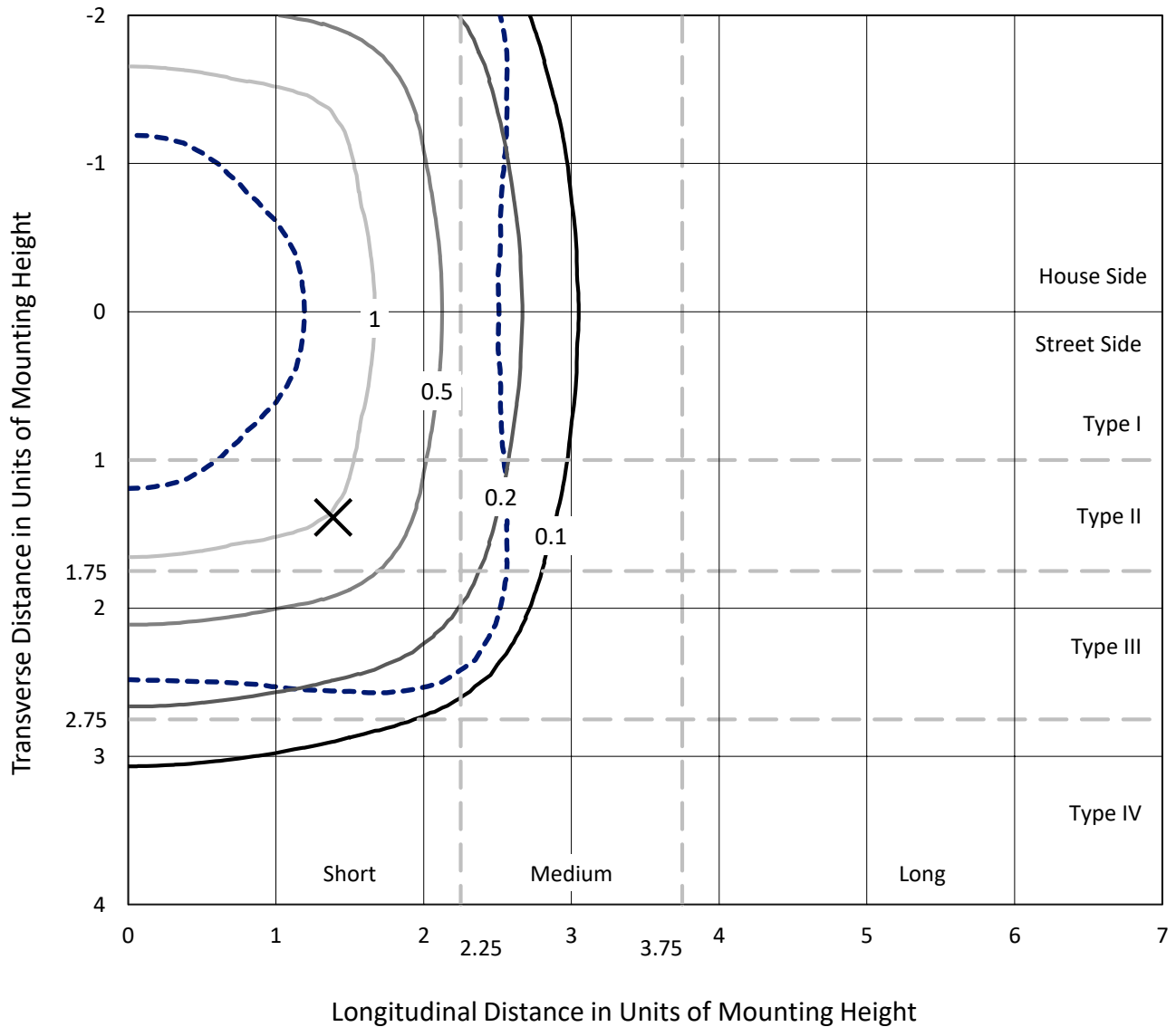
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

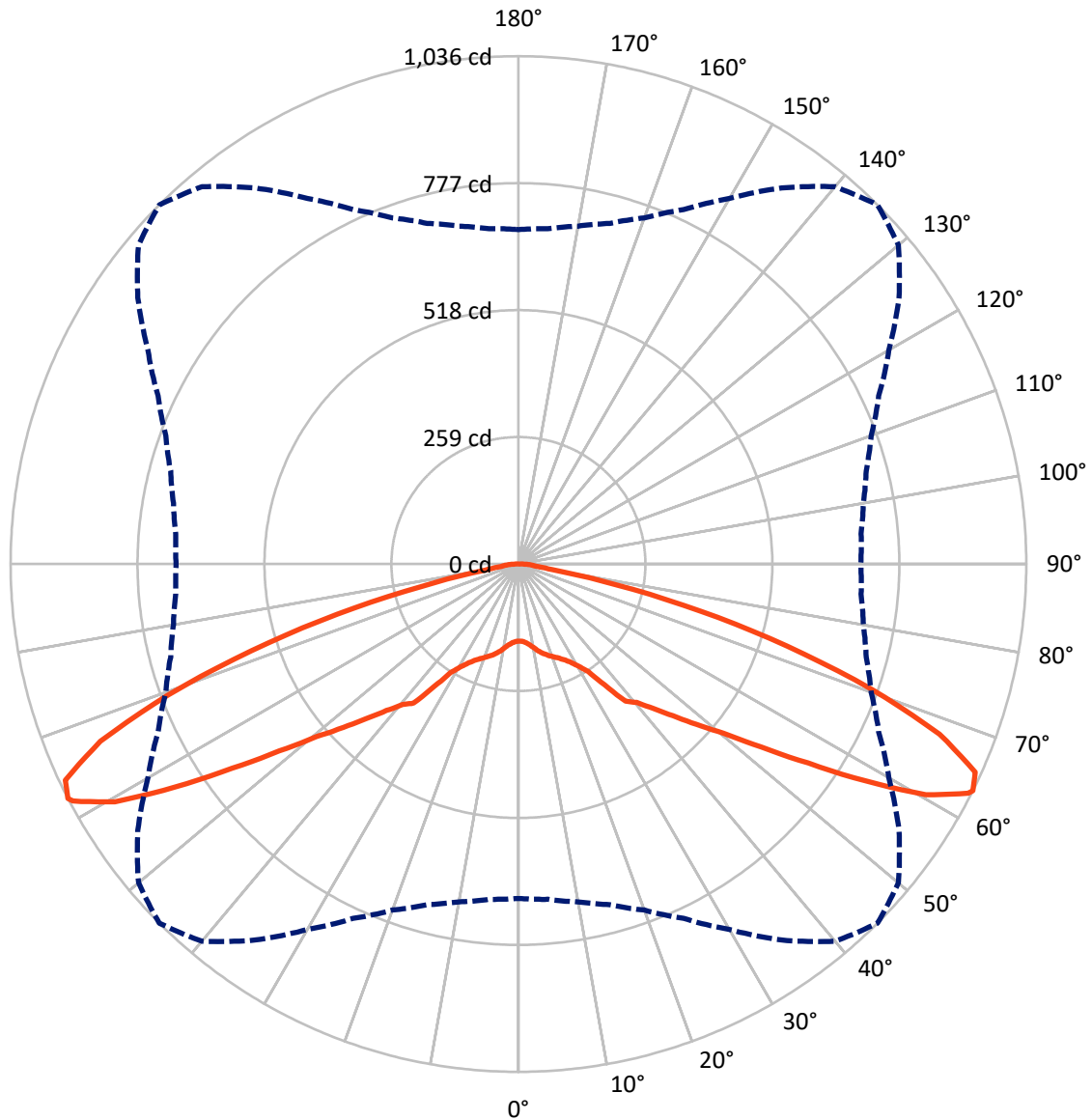
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.7 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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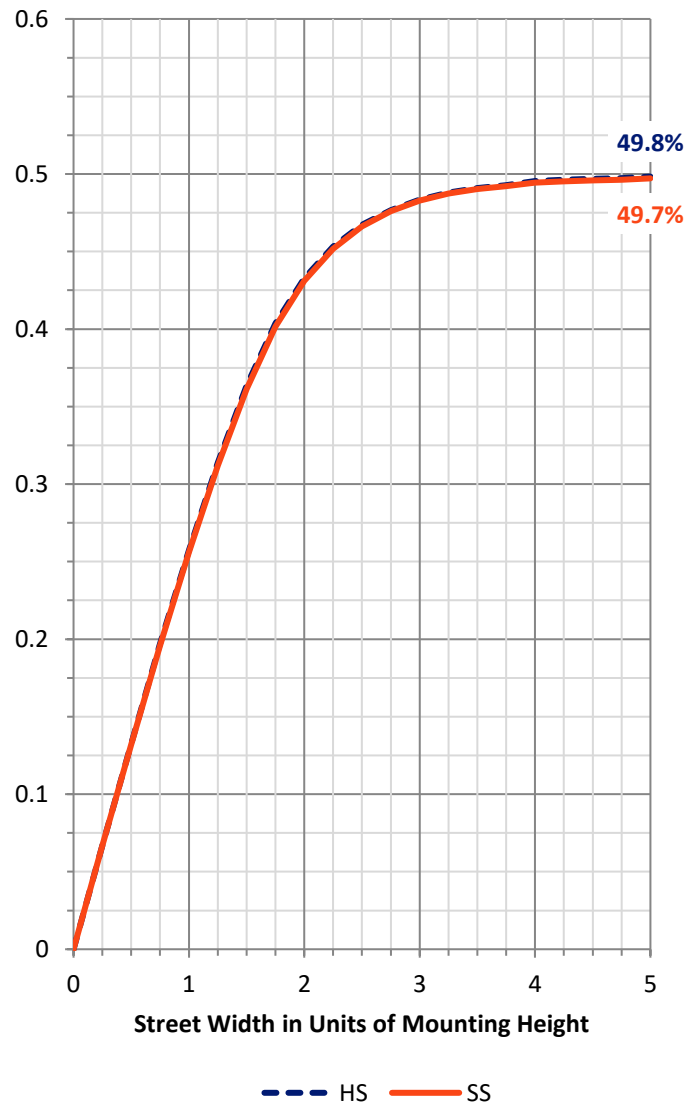
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1171.6	0.0	1171.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1171.6	0.0	1171.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	2343.2	0.0	2343.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.8	0.7
10°-20°	54.1	2.3
20°-30°	103.3	4.4
30°-40°	196.8	8.4
40°-50°	339.0	14.5
50°-60°	605.7	25.8
60°-70°	737.8	31.5
70°-80°	262.8	11.2
80°-90°	27.9	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°	2343.2	100.0
0°-180°	2343.2	100.0



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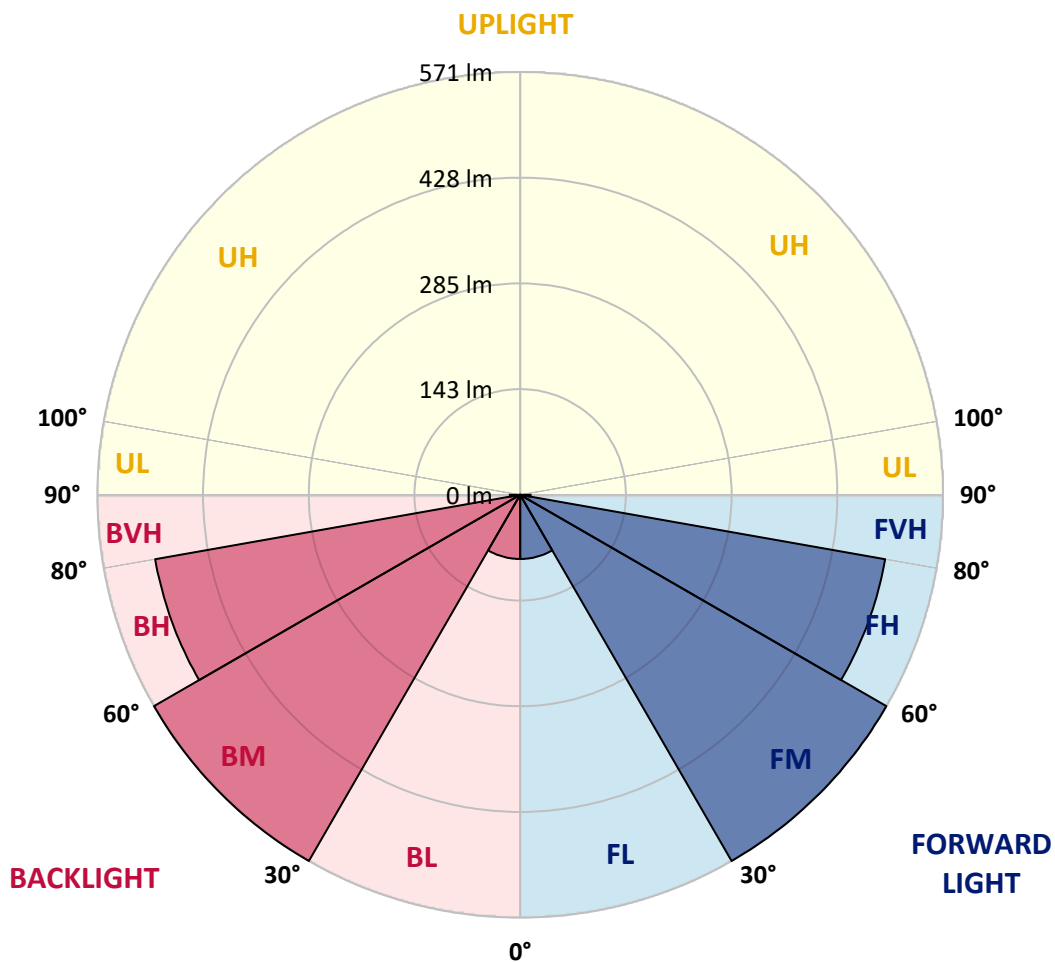
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	86.6	3.7			
FM (30°-60°)	570.7	24.4			
FH (60°-80°)	500.3	21.4			G0/660
FVH (80°-90°)	13.9	0.6			G1/100
BL (0°-30°)	86.6	3.7	B0/110		
BM (30°-60°)	570.7	24.4	B1/1000		
BH (60°-80°)	500.3	21.4	B2/1000		G0/660
BVH (80°-90°)	13.9	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3
2.5°	158.5	158.3	158.5	158.2	158.2	158.0	158.0	158.0	157.7	158.0	157.7
5°	161.8	161.7	161.8	161.5	161.5	161.2	161.2	161.2	160.9	161.2	161.1
7.5°	167.5	167.8	167.5	167.2	167.2	166.9	166.8	166.8	166.6	166.5	166.8
10°	175.5	175.8	175.4	175.1	174.9	174.8	174.5	174.3	174.3	173.7	173.9
12.5°	184.0	184.0	183.5	183.4	183.4	183.1	182.5	182.3	182.3	182.0	181.7
15°	191.5	191.5	191.2	190.6	190.8	190.3	189.9	189.6	189.6	189.3	189.0
17.5°	198.5	198.5	198.0	197.4	197.1	196.9	196.3	196.0	196.0	195.7	195.4
20°	205.4	205.7	204.9	204.3	203.7	203.1	202.5	202.2	201.8	201.9	201.8
22.5°	213.7	213.8	212.6	211.9	210.7	209.9	209.0	208.7	208.1	208.1	208.4
25°	224.2	224.1	222.7	221.4	220.0	218.5	217.2	216.8	216.2	216.1	216.2
27.5°	238.1	238.0	236.3	234.5	232.7	230.4	228.8	227.9	227.4	226.8	227.1
30°	255.2	255.5	253.5	251.4	249.1	246.4	244.3	243.1	242.2	241.6	241.9
32.5°	289.8	289.5	286.5	282.0	277.2	270.8	265.7	263.6	261.9	261.3	261.8
35°	324.7	324.4	323.2	321.8	320.6	316.5	312.8	308.4	304.8	302.5	303.1
37.5°	341.1	341.1	340.2	339.9	339.9	342.3	345.3	350.8	355.0	355.3	353.9
40°	366.7	366.7	365.2	364.5	364.0	364.8	366.7	368.7	370.8	371.3	369.8
42.5°	396.9	395.5	394.5	393.0	392.8	393.6	395.7	398.1	400.2	402.0	398.9
45°	429.5	428.3	427.2	426.3	426.9	428.9	431.7	436.0	439.0	441.7	439.1
47.5°	465.8	463.3	464.3	463.4	464.9	468.8	474.0	480.3	483.5	488.3	484.2
50°	511.1	511.7	511.1	511.1	512.9	518.0	525.5	534.1	539.6	542.3	539.9
52.5°	578.3	576.5	572.4	573.6	576.1	584.2	594.0	606.1	613.0	619.5	611.9
55°	651.9	652.2	651.6	653.3	657.9	666.2	678.6	696.8	705.6	716.9	707.8
57.5°	712.8	714.9	718.6	723.5	733.6	747.5	771.8	799.7	822.9	835.1	820.9
60°	732.6	734.7	743.4	757.3	776.3	804.7	844.0	891.8	933.6	955.3	936.8
62.5°	694.6	698.5	711.5	730.6	762.0	806.3	864.8	935.6	999.9	1029.7	1007.2
63°	682.2	686.6	699.9	719.3	751.3	797.6	860.8	936.5	1004.6	1036.0	1011.7
65°	627.3	630.2	644.2	666.4	702.0	750.2	820.5	910.1	987.7	1024.1	998.3
67.5°	540.9	544.7	557.5	576.7	611.2	662.3	731.4	820.6	897.1	926.2	904.2
70°	433.8	438.1	448.6	466.4	493.6	540.9	600.0	683.4	740.9	763.6	740.1
72.5°	304.9	306.7	314.4	333.1	353.5	391.2	438.1	502.9	558.1	573.0	550.4
75°	129.1	129.2	139.3	151.3	176.7	214.3	255.2	310.9	360.6	383.8	355.1
77.5°	41.3	41.8	44.6	49.0	57.5	74.2	104.4	135.0	180.5	202.5	175.7
80°	34.5	35.1	36.3	37.2	37.9	38.8	42.2	47.0	59.3	68.9	55.6
82.5°	29.7	30.8	33.5	34.5	35.1	35.4	35.9	35.7	35.0	34.7	34.8
85°	22.6	25.2	28.2	30.6	30.9	31.1	32.0	32.3	29.9	27.4	29.9
87.5°	9.8	12.7	19.5	21.6	21.1	19.6	21.0	22.2	20.2	14.8	19.8
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°	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3
2.5°	157.9	158.2	158.2	158.2	158.2	158.3	158.5	158.3
5°	161.2	161.5	161.4	161.5	161.5	161.7	161.8	161.7
7.5°	166.9	166.9	166.9	167.2	167.2	167.5	167.5	167.5
10°	174.0	173.9	173.9	174.2	174.5	174.6	174.9	174.8
12.5°	181.7	181.4	181.6	181.9	182.2	182.3	182.6	182.5
15°	188.6	188.5	188.5	189.0	189.1	189.3	189.9	189.9
17.5°	195.3	195.3	195.3	195.9	196.0	196.6	197.1	197.1
20°	201.9	201.9	201.9	202.5	203.0	203.9	204.8	204.6
22.5°	208.7	208.9	209.2	209.8	210.8	212.2	212.9	212.9
25°	217.2	217.8	218.4	219.3	220.8	222.6	223.8	224.2
27.5°	228.0	229.4	230.9	232.2	233.9	236.2	237.8	238.1
30°	242.8	244.7	247.2	249.0	251.1	253.6	255.6	256.7
32.5°	263.7	268.6	271.7	278.2	282.1	286.5	290.1	291.6
35°	306.9	311.7	315.9	320.3	321.2	322.7	324.7	325.1
37.5°	349.6	345.6	341.9	341.7	340.7	341.0	341.6	342.3
40°	368.1	366.9	364.9	365.7	365.8	365.8	367.0	367.2
42.5°	398.0	395.1	392.8	394.6	394.9	395.2	396.4	397.8
45°	436.0	431.6	428.7	427.7	428.7	428.4	430.1	430.4
47.5°	479.4	473.7	467.2	465.1	464.5	463.1	466.0	465.7
50°	532.6	523.4	515.6	512.6	511.1	510.3	511.1	511.1
52.5°	600.0	590.8	580.1	576.7	575.4	577.1	574.7	577.3
55°	692.8	677.8	663.2	658.5	657.8	657.0	657.3	658.4
57.5°	797.1	770.6	751.0	739.5	732.1	728.5	724.6	724.0
60°	897.9	849.6	812.4	787.0	769.1	755.5	748.6	746.2
62.5°	946.4	875.8	817.9	774.8	748.1	725.9	713.7	710.6
63°	947.8	872.5	811.1	765.6	734.5	714.6	701.7	698.3
65°	922.6	836.9	765.0	714.9	682.1	661.3	645.3	641.8
67.5°	830.9	747.8	674.2	623.4	587.8	571.1	553.4	553.0
70°	681.9	607.7	545.7	499.0	469.3	452.7	434.8	435.2
72.5°	498.5	432.6	390.0	353.5	322.1	306.4	289.5	291.2
75°	300.1	241.3	202.8	171.2	138.9	119.6	106.6	99.2
77.5°	128.3	87.8	63.0	50.1	42.2	39.1	37.5	37.1
80°	44.6	39.5	37.2	36.6	36.2	35.6	34.5	33.5
82.5°	36.2	36.2	35.0	34.8	33.5	32.4	29.7	28.4
85°	32.1	31.5	30.5	30.0	29.7	27.4	24.0	22.2
87.5°	21.3	19.8	18.8	19.3	18.7	16.7	10.3	8.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)