

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: P143921

Luminaire Tested: **LDRL-5WQ-E01-E-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143921
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5WQ-E01-E-7050
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3145.6 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G1

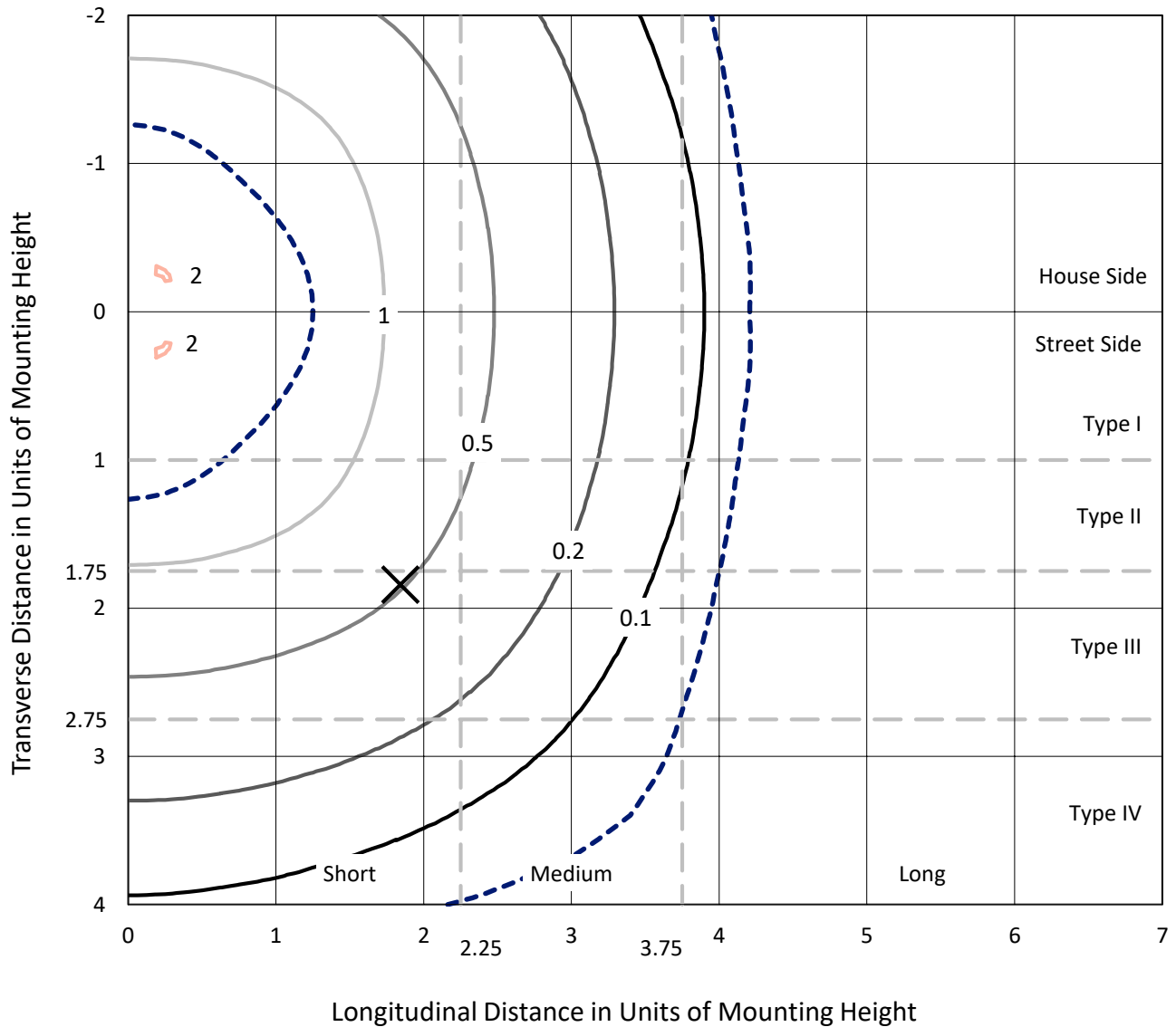
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

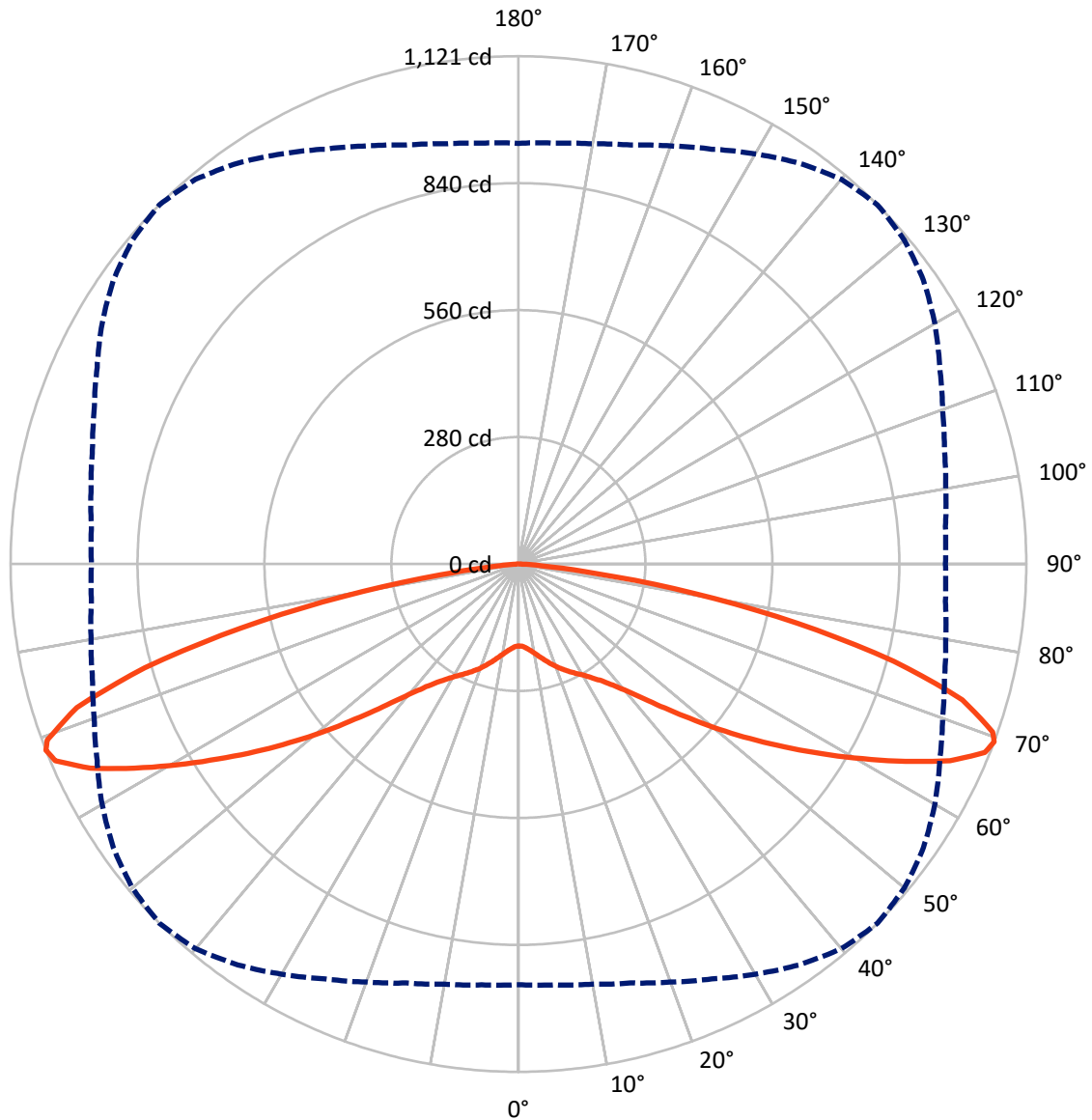
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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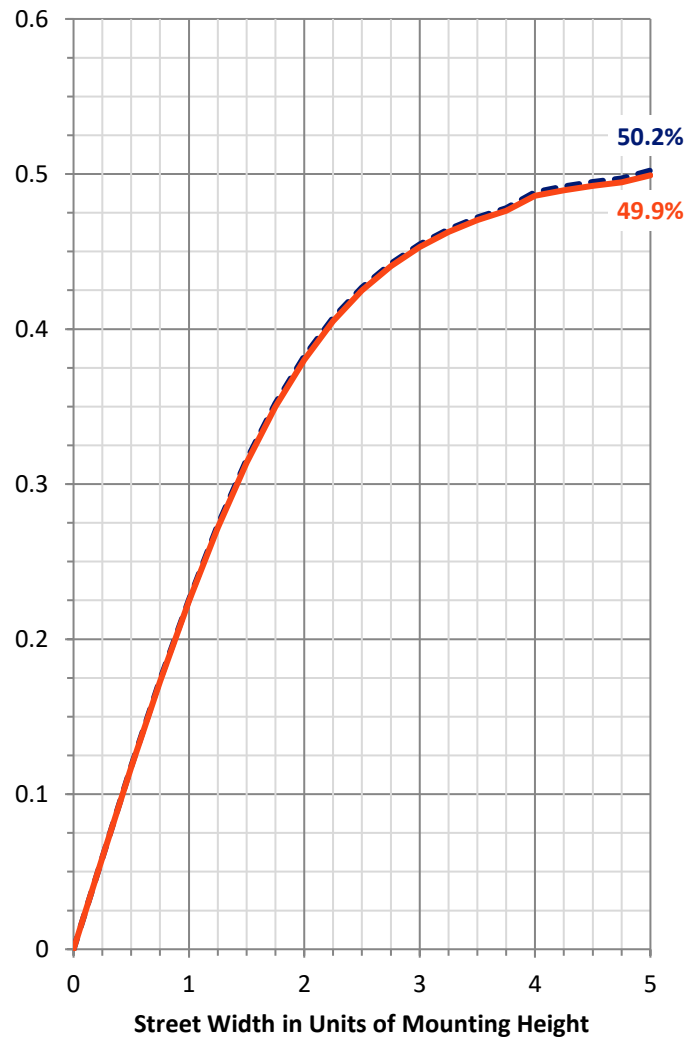
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1572.8	0.0	1572.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1572.8	0.0	1572.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	3145.6	0.0	3145.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.2	0.6
10°-20°	62.9	2.0
20°-30°	121.2	3.9
30°-40°	198.6	6.3
40°-50°	345.2	11.0
50°-60°	613.3	19.5
60°-70°	952.2	30.3
70°-80°	758.6	24.1
80°-90°	75.4	2.4
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°	3145.6	100.0
0°-180°	3145.6	100.0



--- HS — SS

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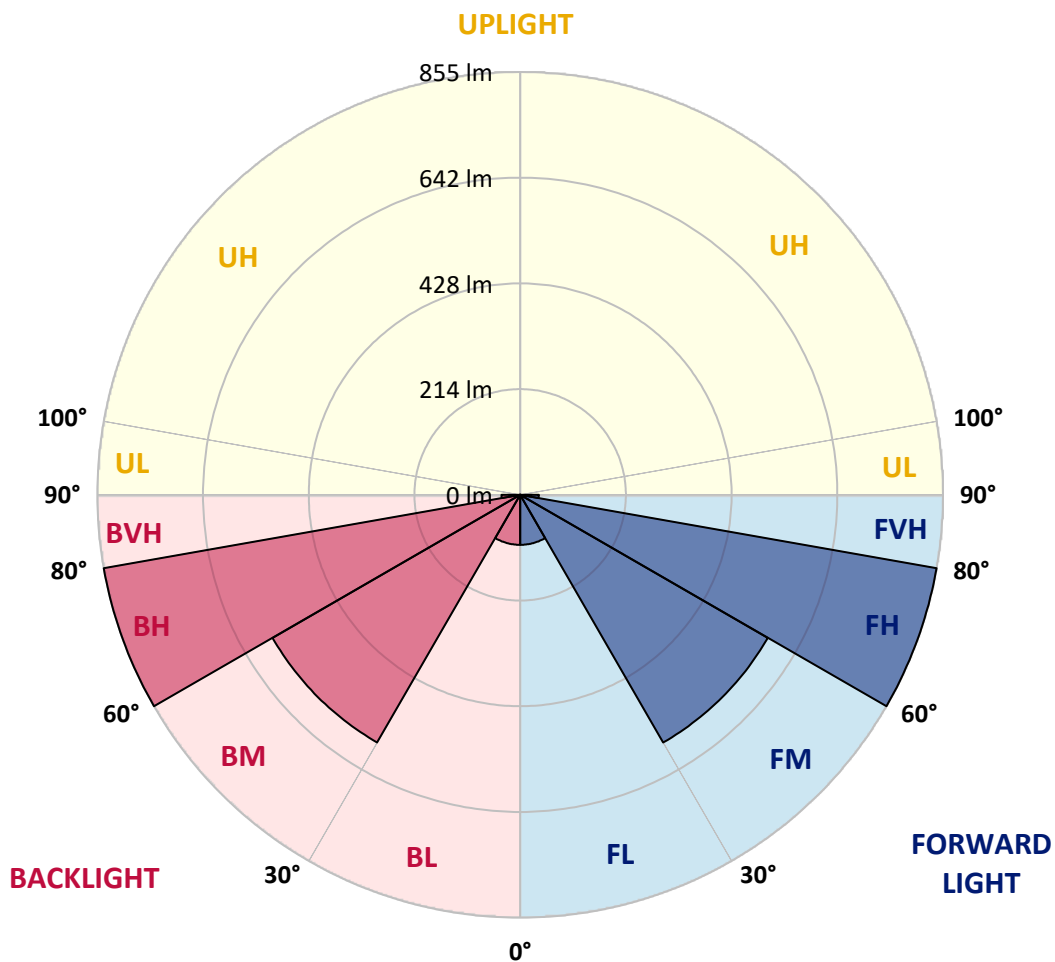
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	101.1	3.2			
FM	(30°-60°)	578.5	18.4			
FH	(60°-80°)	855.4	27.2			G1/1800
FVH	(80°-90°)	37.7	1.2			G1/100
BL	(0°-30°)	101.1	3.2	B0/110		
BM	(30°-60°)	578.5	18.4	B1/1000		
BH	(60°-80°)	855.4	27.2	B2/1000		G1/1800
BVH	(80°-90°)	37.7	1.2			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°	180.8	180.8	180.8	180.8	180.8	180.8	180.8	180.8	180.8	180.8	180.8
2.5°	182.2	182.2	182.2	182.0	182.0	181.8	182.0	181.8	181.8	181.8	181.8
5°	187.0	186.5	186.5	186.3	186.8	186.8	186.3	186.5	186.3	186.5	186.5
7.5°	192.9	192.9	192.9	192.7	193.1	192.9	192.7	192.9	192.9	192.7	192.7
10°	200.3	200.5	200.3	200.3	200.9	200.7	200.9	200.9	201.1	200.9	200.9
12.5°	208.9	208.9	209.1	209.3	209.5	209.7	210.4	210.1	210.6	210.1	210.1
15°	219.0	219.4	219.0	219.0	219.6	220.0	220.2	220.2	220.6	220.4	220.0
17.5°	229.6	229.8	229.6	229.4	230.1	230.7	230.9	230.9	231.5	231.1	231.1
20°	240.5	240.7	240.3	240.1	240.9	240.9	241.3	241.5	242.2	242.4	241.8
22.5°	250.6	250.8	250.6	250.4	251.2	251.2	251.8	252.0	252.8	252.6	252.6
25°	260.4	260.4	260.2	260.2	261.0	261.2	261.9	262.3	263.1	263.1	263.1
27.5°	269.5	269.7	269.3	269.0	270.7	271.3	271.7	272.5	273.1	273.6	273.4
30°	279.7	279.7	279.5	280.1	281.2	282.0	282.8	284.0	285.3	284.8	284.8
32.5°	291.8	292.2	292.0	292.9	294.1	295.3	296.3	297.8	298.4	299.4	298.6
35°	308.0	308.9	308.4	309.3	310.3	311.1	313.4	314.8	315.8	316.5	316.0
37.5°	328.4	327.9	328.8	329.0	331.0	332.0	334.7	336.8	338.4	339.0	338.6
40°	353.6	353.0	354.0	355.0	357.7	358.7	361.8	364.9	367.1	368.0	367.6
42.5°	383.8	384.6	386.2	387.7	391.4	394.2	397.7	402.2	404.7	405.7	404.3
45°	423.4	421.9	425.0	428.7	430.8	437.1	442.9	447.6	451.7	453.3	451.7
47.5°	468.5	468.3	472.0	476.5	481.9	487.8	494.6	500.7	507.9	508.3	506.3
50°	518.4	522.5	524.5	529.1	538.9	546.3	554.9	564.2	570.7	572.8	569.1
52.5°	578.5	581.6	582.8	590.4	599.5	608.5	620.6	631.7	639.3	640.1	638.2
55°	643.8	646.2	648.5	657.7	667.6	675.6	691.0	701.9	709.4	712.3	711.1
57.5°	711.3	713.6	716.4	726.5	736.5	747.8	762.4	775.1	783.9	789.3	787.8
60°	786.2	786.2	792.8	802.8	811.0	824.4	839.6	854.3	864.0	872.4	870.1
62.5°	865.0	867.3	873.6	881.8	890.5	902.8	920.0	937.7	952.4	958.8	958.6
65°	924.7	928.8	937.2	946.7	961.1	975.6	997.4	1019.3	1037.2	1046.4	1046.4
67.5°	942.2	944.8	955.3	969.7	990.4	1013.6	1043.1	1073.7	1098.1	1110.2	1102.7
69°	928.2	932.1	941.3	956.9	981.6	1009.9	1045.0	1079.7	1108.0	1120.5	1111.7
70°	912.0	916.3	925.5	940.9	966.4	996.6	1031.6	1069.0	1099.4	1110.0	1100.0
72.5°	845.9	851.3	857.8	871.2	894.1	922.5	954.1	986.9	1016.0	1024.5	1011.9
75°	733.3	734.3	737.6	747.4	755.6	775.7	802.6	828.7	850.6	855.6	842.2
77.5°	519.0	513.5	507.9	516.3	522.9	548.8	577.9	599.2	622.2	629.2	615.7
80°	227.6	225.5	233.3	244.4	273.4	290.6	319.1	349.7	369.2	392.0	367.6
82.5°	44.9	47.4	54.8	67.7	83.5	105.1	123.7	144.9	164.0	172.6	163.8
85°	18.3	19.9	22.6	25.2	27.1	30.4	35.7	44.3	48.8	49.5	47.0
87.5°	7.6	8.8	11.9	14.2	14.4	13.7	14.2	14.6	11.9	9.6	12.1
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°	180.8	180.8	180.8	180.8	180.8	180.8	180.8	180.8
2.5°	181.8	182.0	181.8	182.0	181.8	181.8	182.0	181.8
5°	186.3	186.5	186.3	186.1	185.9	186.1	186.1	186.1
7.5°	192.7	192.5	192.3	192.3	192.1	191.9	192.3	192.3
10°	200.5	200.3	199.9	199.9	199.7	199.7	199.7	199.7
12.5°	209.9	209.3	209.1	208.5	208.3	208.1	208.1	208.3
15°	219.8	219.2	219.0	217.9	217.9	217.7	217.7	217.7
17.5°	230.3	229.6	228.8	228.8	228.2	227.8	228.0	227.6
20°	240.9	240.1	239.7	239.5	238.7	238.7	238.7	238.5
22.5°	251.4	250.8	250.2	249.3	248.5	248.3	248.3	248.1
25°	262.1	261.0	259.8	259.0	258.2	257.6	257.6	257.6
27.5°	272.7	271.5	269.7	268.6	267.4	266.8	266.8	266.6
30°	284.0	282.6	280.9	279.5	277.9	277.3	277.0	276.6
32.5°	297.6	296.1	294.5	292.4	290.8	289.8	289.8	289.2
35°	314.8	313.2	311.9	309.3	307.2	305.6	305.8	306.2
37.5°	337.4	335.3	334.3	331.0	328.4	326.7	326.7	326.5
40°	366.1	364.1	361.8	358.7	355.4	353.2	352.6	352.6
42.5°	402.6	400.8	397.7	393.4	389.5	387.0	385.0	385.2
45°	448.4	446.2	441.8	436.5	431.8	428.3	425.4	425.4
47.5°	504.0	499.3	493.4	488.6	480.6	475.3	473.2	472.8
50°	567.4	558.6	551.2	544.5	536.0	530.5	527.4	526.6
52.5°	633.9	624.7	615.5	606.6	596.4	590.6	585.7	585.3
55°	706.2	694.5	682.8	674.2	662.0	656.1	651.2	648.3
57.5°	779.8	766.7	758.3	746.0	733.3	728.9	724.2	720.7
60°	862.7	848.4	837.3	824.4	816.2	806.9	802.4	799.7
62.5°	947.5	934.2	920.0	907.7	896.2	889.8	883.7	880.6
65°	1033.7	1011.7	994.9	977.9	964.3	952.8	943.2	942.0
67.5°	1086.6	1058.9	1030.8	1006.0	986.1	969.9	960.0	956.5
69°	1091.0	1060.8	1025.7	995.9	973.0	957.4	945.7	942.0
70°	1079.1	1048.7	1011.7	979.7	955.9	938.9	929.2	923.1
72.5°	992.0	965.4	929.9	898.3	876.7	856.8	847.2	844.7
75°	818.4	790.1	757.5	742.3	727.3	714.8	708.2	707.6
77.5°	581.2	552.2	527.4	507.5	491.3	483.3	485.1	478.4
80°	332.7	294.9	264.9	247.3	223.3	208.9	192.7	204.4
82.5°	143.0	115.5	88.0	71.6	54.6	43.3	35.7	33.2
85°	40.0	32.6	27.3	25.0	22.6	20.1	17.0	15.8
87.5°	13.5	12.9	11.5	11.5	10.5	8.8	6.2	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)