

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: P960509

Luminaire Tested: **NAV-SB1C-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5273.6 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 54.4
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: 24 FT



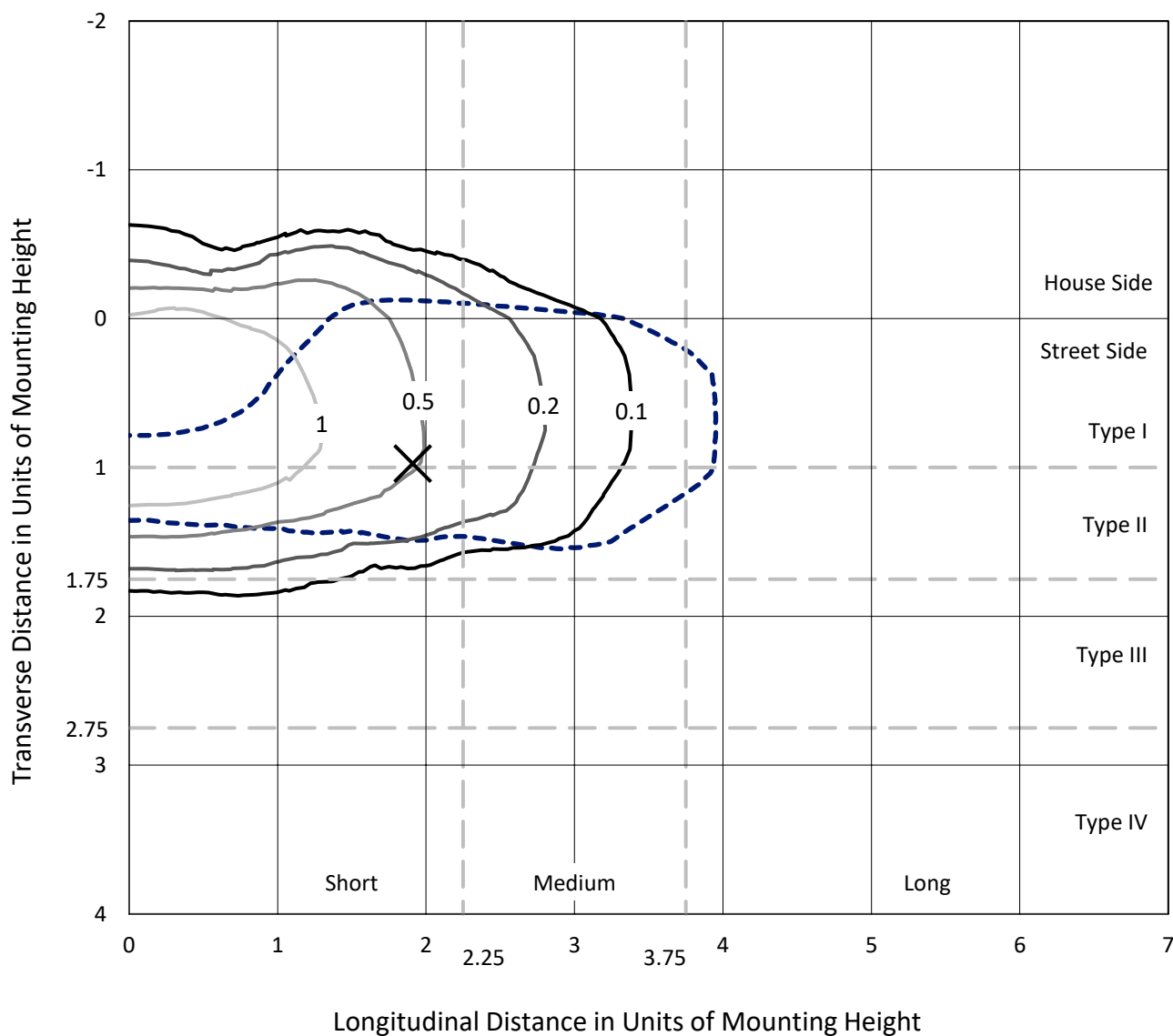
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

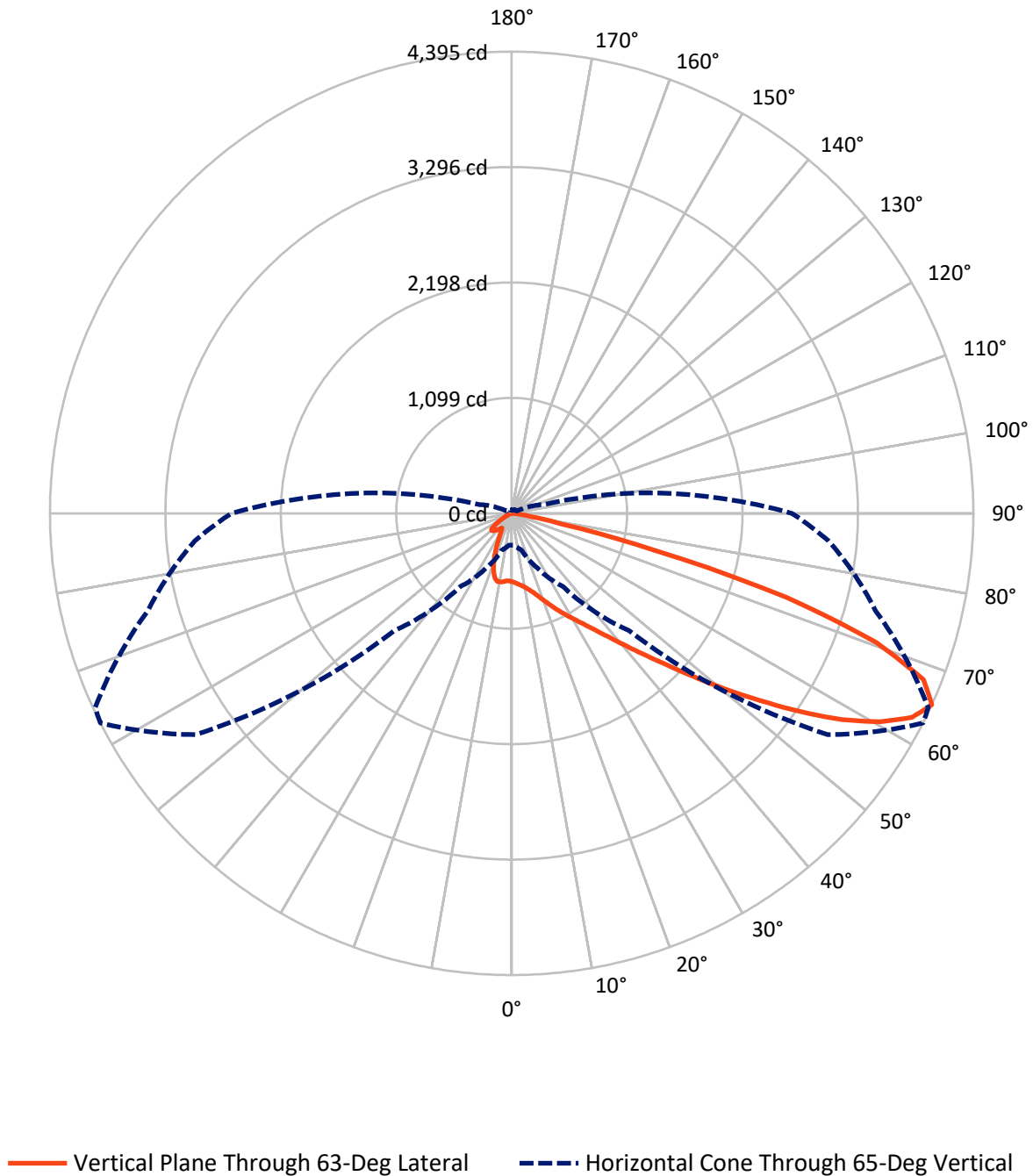


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	775.2	0.0	775.2
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	4498.4	0.0	4498.4
	% Fixture	85.3	0.0	85.3
Total	Lumens	5273.6	0.0	5273.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	1.2
10°-20°	170.2	3.2
20°-30°	296.3	5.6
30°-40°	534.0	10.1
40°-50°	1059.1	20.1
50°-60°	1442.7	27.4
60°-70°	1151.5	21.8
70°-80°	521.1	9.9
80°-90°	37.5	0.7
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°	5273.6	100.0
0°-180°	5273.6	100.0

Coefficient of Utilization



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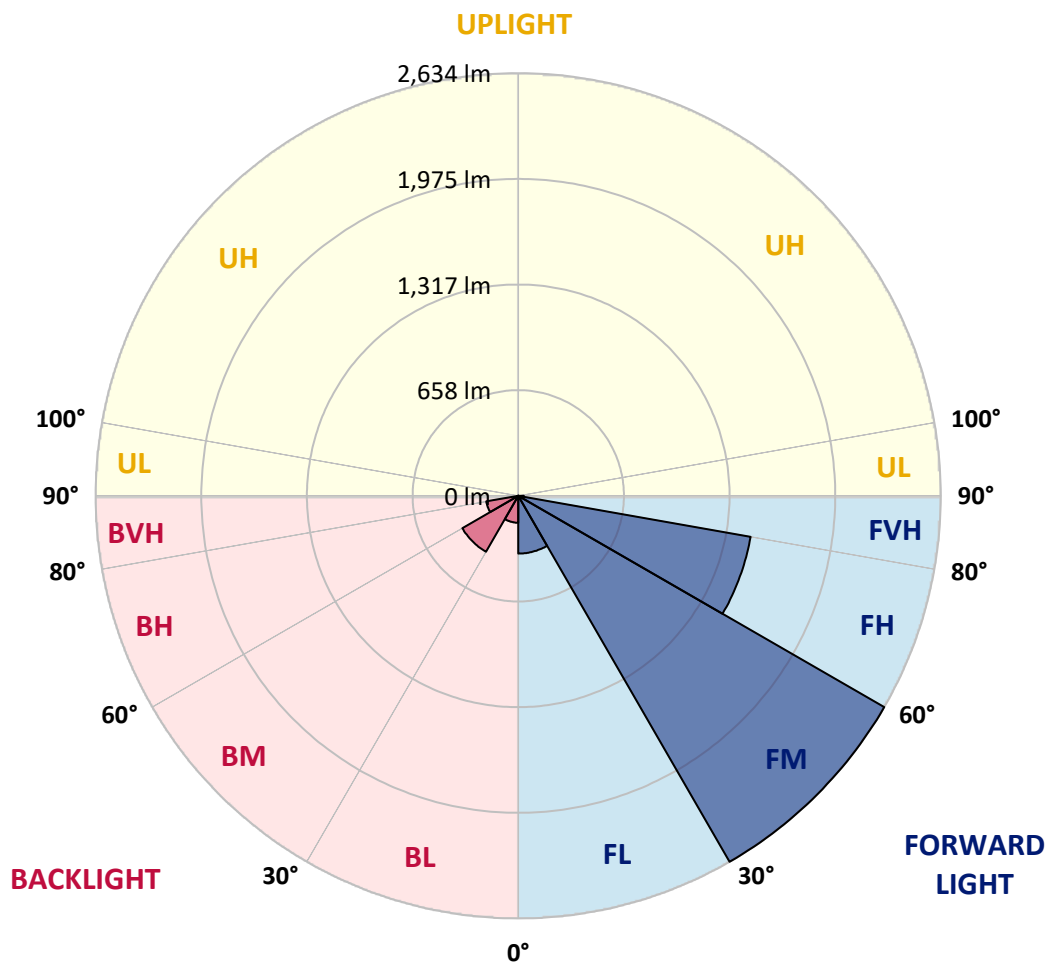
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	360.0	6.8			
FM	(30°-60°)	2633.5	49.9			
FH	(60°-80°)	1470.3	27.9			G1/1800
FVH	(80°-90°)	34.7	0.7			G1/100
BL	(0°-30°)	167.8	3.2	B1/500		
BM	(30°-60°)	402.3	7.6	B1/1000		
BH	(60°-80°)	202.4	3.8	B1/500		G1/500
BVH	(80°-90°)	2.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9
2.5°	666.1	664.3	666.9	665.7	665.0	663.6	662.9	662.2	660.6	659.6	655.2
5°	667.9	666.9	669.3	671.6	673.7	675.9	677.0	678.4	677.0	674.0	669.7
7.5°	652.7	652.0	657.4	663.9	673.7	682.0	691.2	696.2	696.6	695.5	690.7
10°	651.6	649.7	655.2	663.2	675.9	690.7	706.7	717.6	719.0	723.8	718.7
12.5°	668.6	666.9	674.4	683.2	696.2	711.9	731.4	746.6	748.9	755.3	751.7
15°	697.3	694.7	703.5	714.7	731.4	749.2	769.9	783.6	785.5	793.5	786.9
17.5°	730.7	728.2	738.3	750.3	768.4	792.7	816.6	831.9	834.0	839.2	827.2
20°	773.5	770.2	778.2	789.0	808.3	837.3	866.0	887.8	887.4	887.4	867.9
22.5°	823.2	818.2	825.0	833.7	851.9	887.0	925.2	950.9	950.9	940.7	908.5
25°	876.5	871.5	879.0	887.0	903.0	942.9	987.6	1019.5	1020.9	1003.5	952.0
27.5°	943.3	936.7	942.6	952.0	961.4	1002.0	1055.0	1092.0	1092.8	1065.9	993.3
30°	1071.7	1053.2	1035.0	1024.9	1029.3	1069.6	1126.2	1167.2	1170.8	1133.8	1038.3
32.5°	1306.8	1303.2	1239.3	1155.9	1112.3	1142.1	1205.6	1254.9	1257.1	1209.6	1096.8
35°	1672.2	1667.8	1565.1	1406.2	1264.3	1239.3	1302.1	1360.5	1359.0	1305.3	1172.6
37.5°	2108.2	2104.2	1968.9	1756.3	1526.6	1386.3	1426.5	1487.9	1496.9	1426.5	1270.5
40°	2480.8	2465.9	2380.4	2175.4	1874.9	1630.1	1603.6	1644.2	1653.6	1570.2	1394.9
42.5°	2763.1	2750.4	2706.8	2578.8	2296.5	1990.7	1812.2	1827.8	1838.3	1738.2	1537.9
45°	2909.3	2906.4	2923.8	2911.8	2726.1	2433.4	2110.4	2045.5	2049.5	1924.3	1700.1
47.5°	2930.0	2928.5	3008.0	3120.4	3095.4	2932.5	2493.2	2316.8	2302.7	2134.4	1876.4
50°	2808.1	2805.2	2957.5	3168.4	3342.1	3352.0	2927.8	2622.7	2591.5	2351.7	2060.4
52.5°	2418.8	2418.1	2668.4	3019.2	3428.8	3719.1	3357.4	2958.7	2906.4	2581.7	2254.8
55°	1861.2	1874.6	2161.5	2576.2	3270.7	3895.7	3743.0	3331.6	3251.4	2813.1	2434.1
57.5°	1318.5	1338.0	1621.8	1991.1	2780.1	3791.3	4003.9	3705.3	3619.0	3043.9	2615.8
60°	708.2	725.6	1009.6	1450.5	2068.3	3401.7	4141.4	4029.6	3948.0	3263.0	2779.8
62.5°	421.9	427.7	545.3	936.4	1398.9	2598.8	4083.0	4276.7	4209.6	3447.0	2922.4
65°	303.0	304.0	363.2	571.7	849.3	1578.9	3673.4	4395.0	4374.3	3585.6	3028.0
67.5°	255.0	254.3	279.0	379.9	578.7	790.9	2815.4	4227.7	4315.6	3673.4	3087.8
70°	218.7	219.9	248.9	278.3	435.0	447.7	1399.6	3681.0	3868.1	3696.6	3084.1
72.5°	162.9	166.6	193.4	253.6	328.3	308.0	483.3	2729.4	3067.8	3482.8	2924.2
75°	115.0	116.8	136.0	213.3	244.9	224.2	246.7	1410.9	1844.8	2670.2	2393.4
77.5°	88.6	91.7	103.0	149.1	241.3	157.4	150.9	488.3	750.3	1613.0	1640.9
80°	47.9	53.7	74.4	107.7	169.4	111.4	74.7	194.4	254.3	754.3	632.7
82.5°	24.7	27.6	51.9	77.6	96.6	97.3	37.0	80.9	104.9	232.9	86.7
85°	9.8	12.0	34.8	42.8	49.7	47.9	16.7	32.7	37.7	64.6	26.4
87.5°	2.2	3.6	12.7	9.8	9.4	10.1	4.0	7.6	7.3	7.6	4.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9
2.5°	654.9	653.4	649.4	645.0	640.0	637.0	635.3	634.9	632.3	630.6	632.3
5°	665.7	664.3	656.7	647.6	637.8	630.2	622.9	616.4	607.0	605.2	604.4
7.5°	687.5	683.5	671.2	658.9	640.3	618.2	591.3	560.6	533.0	524.6	520.6
10°	714.3	708.9	693.3	671.6	630.6	570.3	505.4	445.2	397.3	383.9	378.7
12.5°	744.9	740.2	719.4	679.2	589.6	480.3	380.9	306.2	259.7	248.2	244.9
15°	781.2	774.2	745.6	667.6	516.3	365.0	261.6	217.3	200.6	198.4	196.3
17.5°	819.6	808.3	768.7	625.9	417.6	259.4	202.1	189.4	182.1	180.0	178.9
20°	854.7	840.3	782.6	562.7	312.0	202.1	181.0	172.7	166.2	163.6	162.2
22.5°	889.9	869.3	782.6	476.7	234.0	179.3	166.2	158.6	150.9	147.7	145.9
25°	926.6	899.0	768.7	380.9	188.3	164.3	152.0	143.7	137.1	133.1	131.7
27.5°	962.2	924.0	737.2	290.3	167.6	151.3	139.0	131.0	124.8	121.9	121.9
30°	995.9	948.7	692.9	220.2	154.2	138.6	127.0	120.1	113.9	111.0	111.4
32.5°	1041.6	979.9	645.8	180.7	142.6	126.6	116.1	109.6	104.1	102.0	102.0
35°	1105.1	1026.0	605.2	177.4	132.7	116.8	106.3	100.1	94.7	92.9	92.9
37.5°	1195.0	1100.3	583.7	199.2	124.8	108.1	98.3	91.7	86.7	85.3	84.9
40°	1306.1	1201.2	595.3	221.0	119.4	100.4	91.0	84.6	80.2	78.4	78.0
42.5°	1437.8	1325.6	659.6	237.6	115.7	94.0	84.2	76.9	74.0	73.3	73.3
45°	1589.1	1462.5	757.9	255.4	109.9	87.8	77.3	71.9	69.7	69.3	69.0
47.5°	1761.1	1612.6	871.8	277.6	104.1	82.0	71.9	68.2	66.4	65.7	65.7
50°	1931.5	1763.9	989.0	289.9	99.4	76.6	67.4	64.6	63.1	62.7	62.7
52.5°	2110.1	1919.6	1083.7	278.3	95.4	72.2	63.9	61.7	60.3	59.9	59.9
55°	2280.2	2045.5	1100.0	236.2	87.4	67.9	59.9	58.7	57.0	57.0	56.6
57.5°	2426.8	2108.6	984.6	173.4	79.4	61.3	55.9	54.7	53.3	53.0	52.6
60°	2561.4	2090.5	760.0	116.8	70.7	54.7	50.8	50.0	48.6	46.8	46.4
62.5°	2637.2	2010.6	519.9	76.2	62.0	47.9	45.0	44.6	41.4	37.7	37.0
65°	2665.8	1846.6	324.3	55.6	51.9	41.0	38.8	38.1	33.4	29.4	29.0
67.5°	2640.8	1576.8	163.6	43.9	41.0	34.1	31.9	31.9	28.7	25.0	24.7
70°	2540.7	1182.0	69.0	35.2	31.6	26.1	26.1	27.6	24.3	20.3	20.0
72.5°	2323.4	795.3	36.6	26.9	23.6	18.6	21.4	22.4	19.3	15.3	15.3
75°	1847.0	485.0	25.4	20.0	14.9	13.0	16.3	17.0	13.0	10.1	9.8
77.5°	1263.3	278.6	17.0	12.7	9.4	7.6	11.3	10.6	6.9	4.7	5.1
80°	554.7	116.1	9.8	5.8	3.6	2.9	4.0	2.9	2.2	1.4	1.4
82.5°	65.0	27.2	3.6	2.2	1.4	0.7	0.4	0.0	0.0	0.0	0.0
85°	13.4	3.3	1.8	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)