

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: P960513

Luminaire Tested: **NAV-SB1C-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5744.1 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

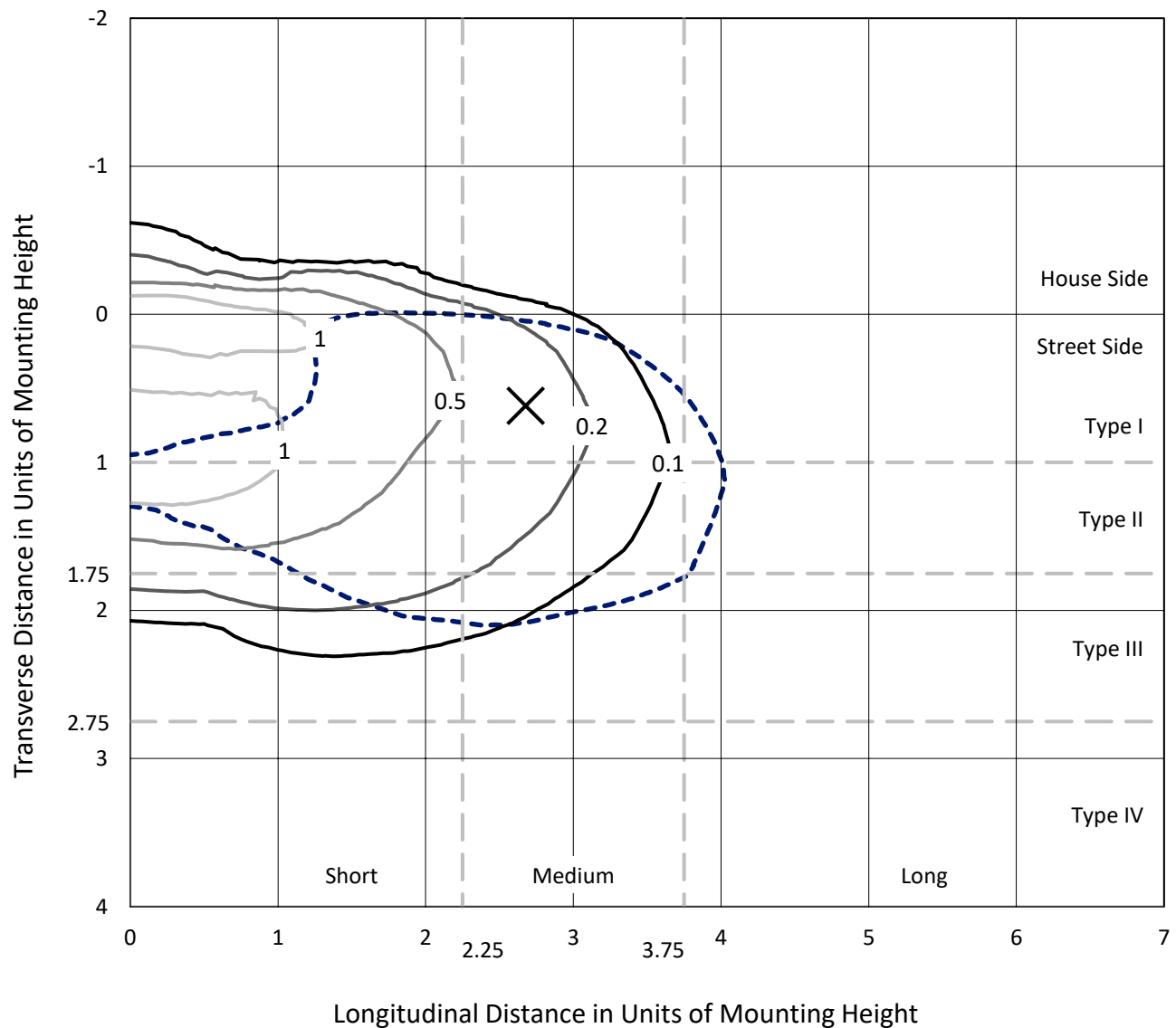
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

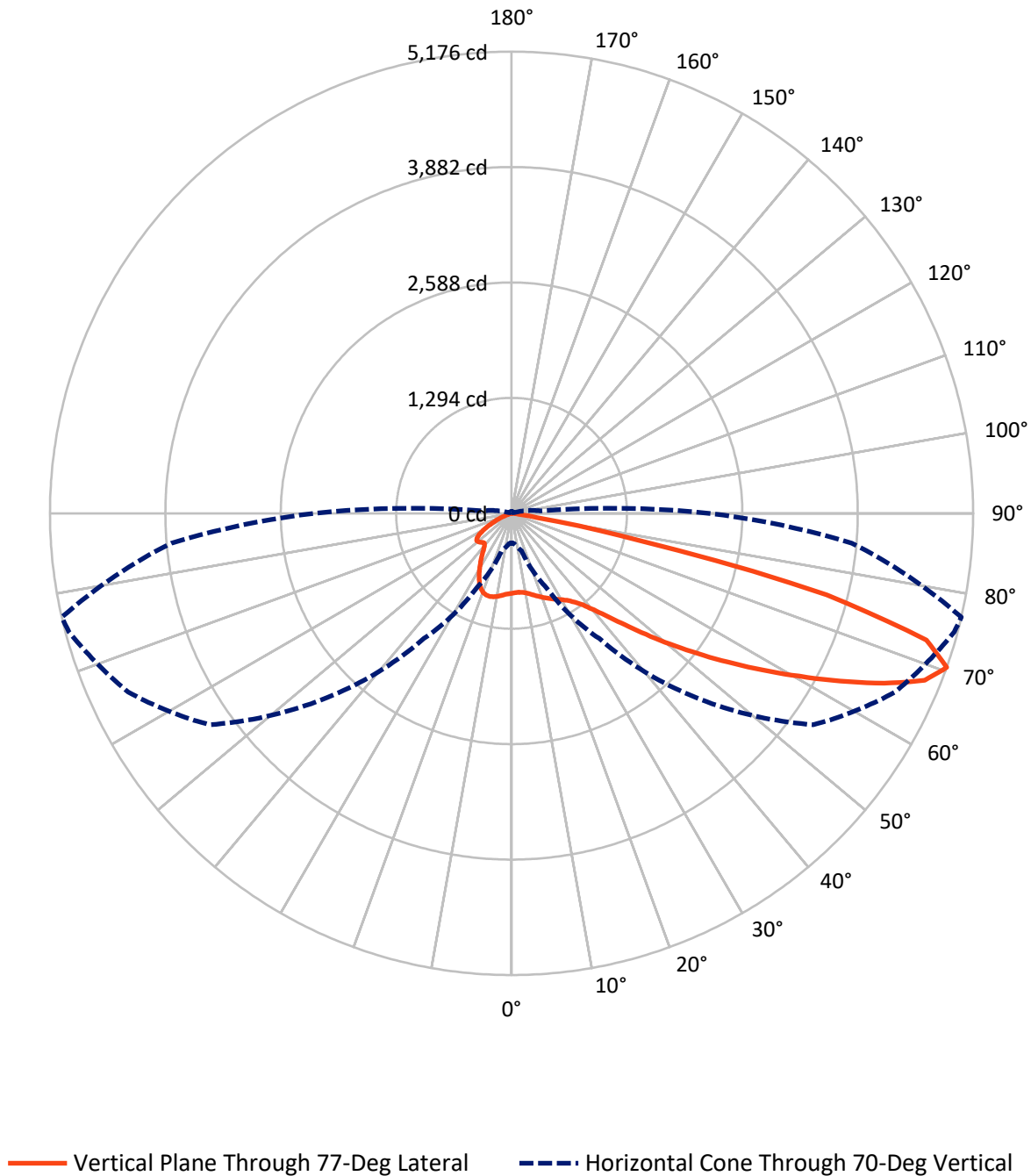
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	605.5	0.0	605.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	5138.6	0.0	5138.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	5744.1	0.0	5744.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	1.3
10°-20°	183.3	3.2
20°-30°	283.5	4.9
30°-40°	514.5	9.0
40°-50°	971.1	16.9
50°-60°	1403.2	24.4
60°-70°	1493.7	26.0
70°-80°	791.5	13.8
80°-90°	26.0	0.5
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°	5744.1	100.0
0°-180°	5744.1	100.0

Coefficient of Utilization



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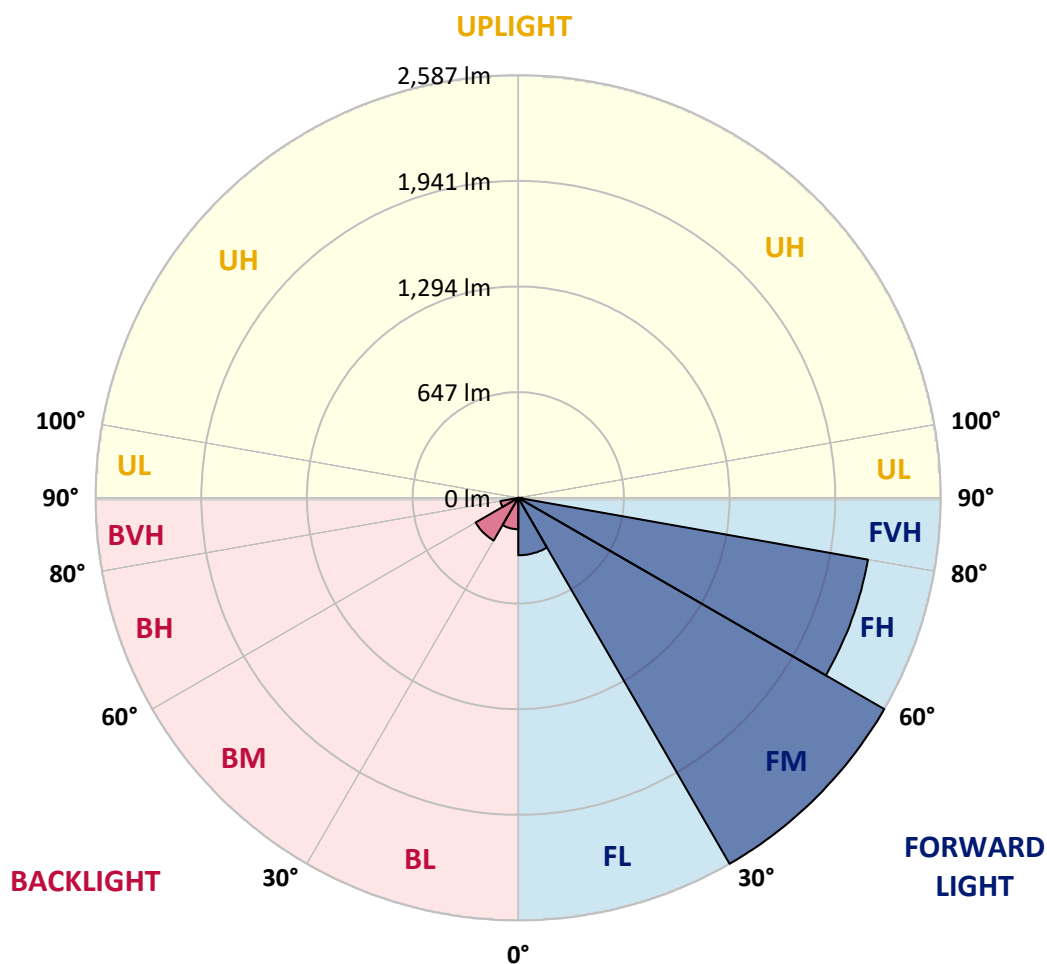
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	351.7	6.1			
FM	(30°-60°)	2587.4	45.0			
FH	(60°-80°)	2174.2	37.9			G2/5000
FVH	(80°-90°)	25.3	0.4			G1/100
BL	(0°-30°)	192.4	3.3	B1/500		
BM	(30°-60°)	301.4	5.2	B1/1000		
BH	(60°-80°)	111.0	1.9	B1/500		G1/500
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0
2.5°	841.2	848.8	847.8	852.8	854.6	861.9	869.1	878.9	889.8	889.5	896.7
5°	793.7	801.3	803.1	810.0	818.7	829.9	844.8	864.4	884.8	888.0	902.5
7.5°	737.5	745.5	750.2	763.9	779.9	803.1	827.4	856.1	889.8	894.5	922.5
10°	681.2	688.5	694.6	714.2	739.6	774.1	813.6	855.0	900.4	907.2	946.8
12.5°	646.4	653.3	660.2	677.2	708.8	750.9	804.5	860.1	917.8	927.5	979.8
15°	634.1	640.2	645.6	660.9	690.3	738.2	802.8	870.6	939.8	952.9	1019.7
17.5°	635.9	639.2	642.8	654.4	683.1	732.4	806.1	888.7	966.0	977.5	1059.5
20°	646.4	648.2	648.6	656.6	681.9	731.6	812.5	906.1	990.7	1006.2	1099.1
22.5°	659.8	660.5	659.8	665.2	688.8	737.1	821.2	927.2	1018.2	1032.7	1139.0
25°	722.6	708.8	691.4	680.9	700.5	747.6	834.4	955.5	1048.4	1062.5	1177.8
27.5°	917.4	877.8	815.5	745.5	724.4	762.8	852.5	984.1	1078.8	1091.5	1219.5
30°	1233.7	1181.8	1075.9	918.1	801.3	794.8	876.1	1012.8	1111.1	1124.8	1264.1
32.5°	1550.7	1538.0	1415.8	1197.4	974.4	865.8	915.2	1051.5	1153.8	1164.8	1324.4
35°	1871.3	1845.6	1745.5	1529.7	1241.0	1010.6	980.5	1102.4	1210.1	1222.4	1412.1
37.5°	2116.9	2101.4	2039.3	1861.6	1557.3	1234.1	1092.2	1181.1	1291.7	1305.5	1524.6
40°	2333.9	2326.6	2305.6	2188.5	1910.9	1526.4	1266.0	1303.0	1404.9	1421.3	1662.4
42.5°	2504.4	2521.4	2533.4	2500.8	2275.5	1860.2	1499.6	1474.2	1562.7	1579.4	1838.0
45°	2678.8	2684.7	2733.0	2780.1	2637.5	2209.1	1762.9	1674.7	1758.9	1779.6	2048.4
47.5°	2791.0	2814.1	2899.0	2982.1	2941.9	2555.1	2045.9	1911.6	1986.3	2025.2	2284.2
50°	2799.3	2843.1	2960.0	3104.7	3163.5	2884.6	2353.5	2181.5	2260.9	2303.8	2536.0
52.5°	2660.4	2728.5	2909.6	3121.4	3283.2	3163.5	2671.6	2451.4	2553.4	2609.2	2797.1
55°	2039.7	2128.9	2719.8	3030.7	3287.9	3374.9	2981.4	2732.5	2879.1	2942.2	3079.3
57.5°	1777.0	1822.0	2138.4	2873.3	3200.5	3460.2	3261.4	3000.3	3233.5	3311.9	3345.9
60°	1478.6	1537.7	1793.4	2615.7	3081.9	3468.6	3508.8	3345.6	3617.6	3705.8	3590.5
62.5°	1004.8	1069.0	1323.3	2173.2	2919.7	3464.6	3711.6	3701.1	4044.5	4139.3	3797.5
65°	622.5	662.8	830.4	1774.6	2693.0	3468.9	3923.8	4132.7	4495.1	4591.3	3957.9
67.5°	491.9	510.3	597.8	1362.4	2302.4	3371.0	4135.7	4538.6	4919.2	4995.3	4006.8
70°	330.5	341.7	434.9	913.4	1712.9	2919.0	4131.7	4742.5	5137.5	5175.6	3828.4
72.5°	174.1	182.9	254.3	422.9	1034.5	2074.9	3482.7	4498.7	4920.2	4862.9	3272.3
75°	87.0	101.6	171.2	214.7	441.8	1157.1	2162.6	3546.9	3872.7	3650.6	2099.5
77.5°	66.0	79.8	141.4	141.4	153.9	389.6	915.9	1934.5	1784.3	1485.8	616.3
80°	42.1	54.4	123.7	107.0	64.2	99.0	238.7	541.9	379.0	288.3	112.1
82.5°	24.7	35.6	103.0	70.7	35.9	36.6	67.4	115.3	98.3	76.6	34.4
85°	9.8	23.2	70.7	27.9	14.1	9.0	20.3	24.7	20.3	15.3	8.7
87.5°	0.0	5.4	12.3	0.0	1.1	0.7	1.4	1.8	1.8	1.4	2.9
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°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0
2.5°	900.0	900.7	902.8	903.2	898.1	891.6	889.1	888.0	883.7	883.2	884.0
5°	910.8	914.1	910.8	901.4	878.9	847.4	823.4	803.8	786.1	780.6	777.4
7.5°	932.6	935.9	926.1	889.1	832.5	769.8	713.2	673.2	637.3	623.9	618.5
10°	963.8	968.1	937.4	862.6	762.5	661.6	565.9	498.5	445.8	424.5	415.3
12.5°	1003.0	1004.8	943.5	822.4	671.5	527.5	391.8	319.6	272.8	255.3	249.9
15°	1046.1	1043.7	944.2	767.5	547.3	372.9	255.7	210.0	191.2	185.3	185.3
17.5°	1091.5	1081.0	929.7	688.5	411.3	255.0	189.7	178.9	175.6	174.1	173.7
20°	1136.1	1112.5	903.2	585.1	295.3	190.4	172.3	169.0	167.2	166.5	165.7
22.5°	1176.7	1136.5	857.9	465.0	214.4	168.3	162.9	160.0	156.7	155.3	154.9
25°	1216.3	1150.3	794.1	352.9	171.6	157.4	153.0	147.6	143.3	141.4	140.7
27.5°	1254.7	1159.0	714.2	261.2	153.0	147.3	139.3	131.7	128.4	127.7	127.0
30°	1295.7	1161.8	623.5	194.7	141.9	134.6	123.0	114.3	112.4	112.9	112.9
32.5°	1345.8	1166.2	532.2	159.6	132.4	119.3	105.6	96.5	95.0	96.5	96.1
35°	1405.6	1175.0	444.0	146.9	124.0	103.7	88.9	81.3	79.8	80.9	80.6
37.5°	1486.9	1189.1	361.6	144.4	117.2	90.7	74.7	68.6	68.6	68.9	68.6
40°	1595.0	1226.8	288.0	142.6	113.6	80.9	63.1	60.6	61.7	62.4	62.4
42.5°	1726.6	1307.0	238.3	140.4	109.6	76.6	57.3	56.3	58.0	58.7	58.7
45°	1874.3	1408.6	220.9	136.7	105.9	79.4	54.7	53.3	55.5	55.9	56.3
47.5°	2027.0	1507.9	218.7	132.7	102.3	83.7	54.0	50.7	53.3	53.7	54.0
50°	2181.5	1572.9	220.9	126.6	96.5	83.7	54.4	48.3	50.4	51.6	51.9
52.5°	2337.2	1602.6	219.5	113.2	86.3	78.7	54.4	46.0	48.3	49.0	49.0
55°	2488.1	1596.7	197.3	93.3	73.3	69.6	53.0	44.3	45.7	46.0	46.0
57.5°	2607.4	1515.9	156.3	72.6	59.4	58.0	48.3	42.1	43.2	42.8	42.8
60°	2669.8	1338.1	111.7	55.9	46.8	45.7	42.4	39.2	39.9	38.1	37.7
62.5°	2670.5	1103.1	74.7	44.3	37.4	36.3	36.3	35.2	34.4	30.9	29.7
65°	2613.5	842.2	49.7	35.2	30.1	28.3	30.4	30.1	27.6	22.4	21.7
67.5°	2484.4	552.1	37.7	27.6	23.2	22.1	24.3	25.4	23.6	18.9	18.4
70°	2218.9	321.4	31.2	21.4	17.4	16.3	19.6	21.7	19.6	15.3	14.6
72.5°	1843.1	173.4	25.4	16.0	12.0	10.9	15.6	17.7	15.6	11.3	10.9
75°	1196.0	92.9	19.6	10.6	6.1	6.9	11.6	13.0	10.9	7.3	6.6
77.5°	401.6	41.0	12.3	5.1	2.9	2.9	6.9	8.0	5.1	2.6	2.2
80°	89.6	17.0	5.1	2.2	1.1	1.1	1.4	1.4	0.7	0.0	0.0
82.5°	29.4	6.9	2.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.3	2.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	0.4	0.0	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)