

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: P961008

Luminaire Tested: **NAV-SB1D-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961008
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7115.5 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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



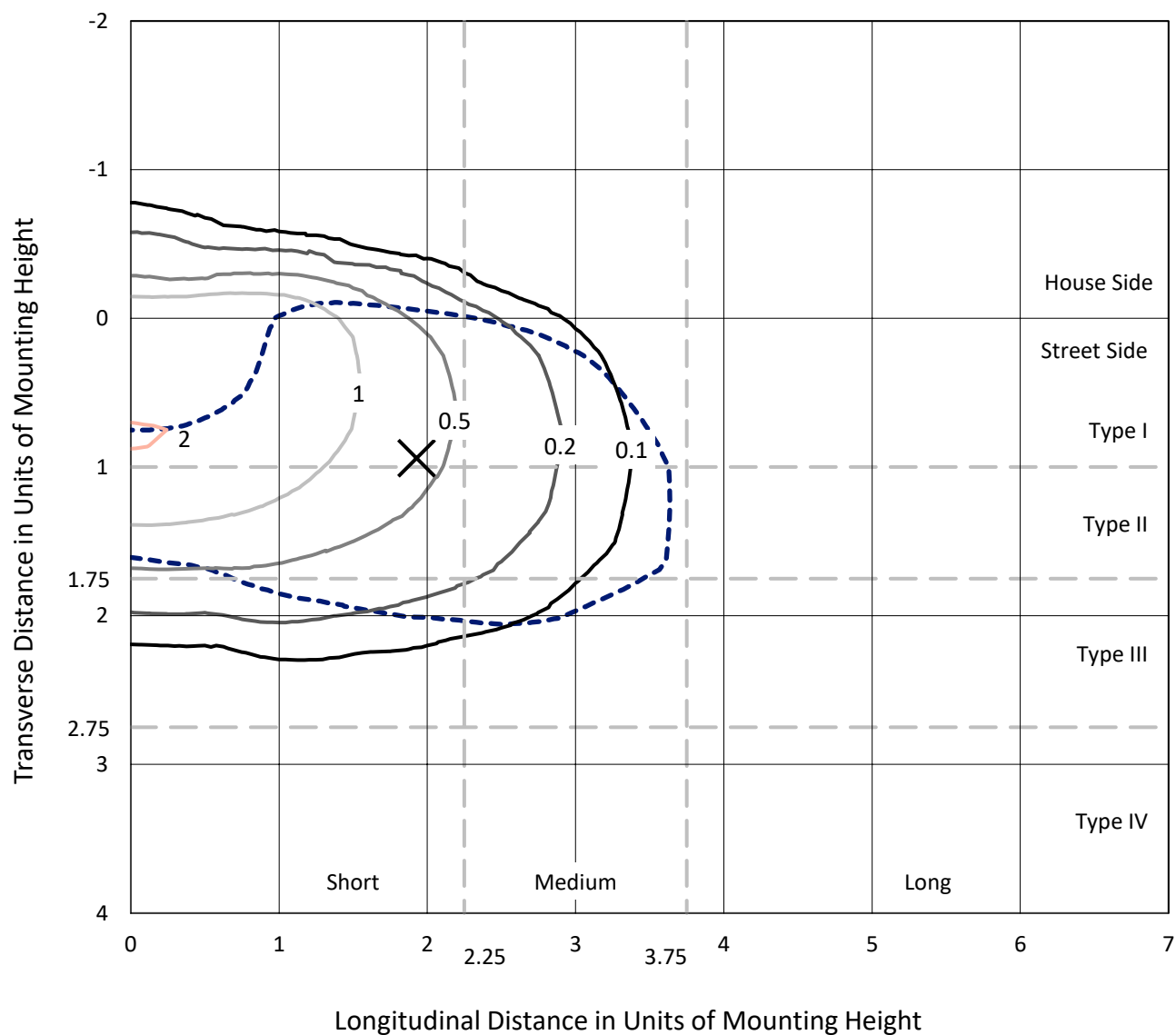
REPORT NUMBER: P961008

CATALOG NUMBER: NAV-SB1D-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

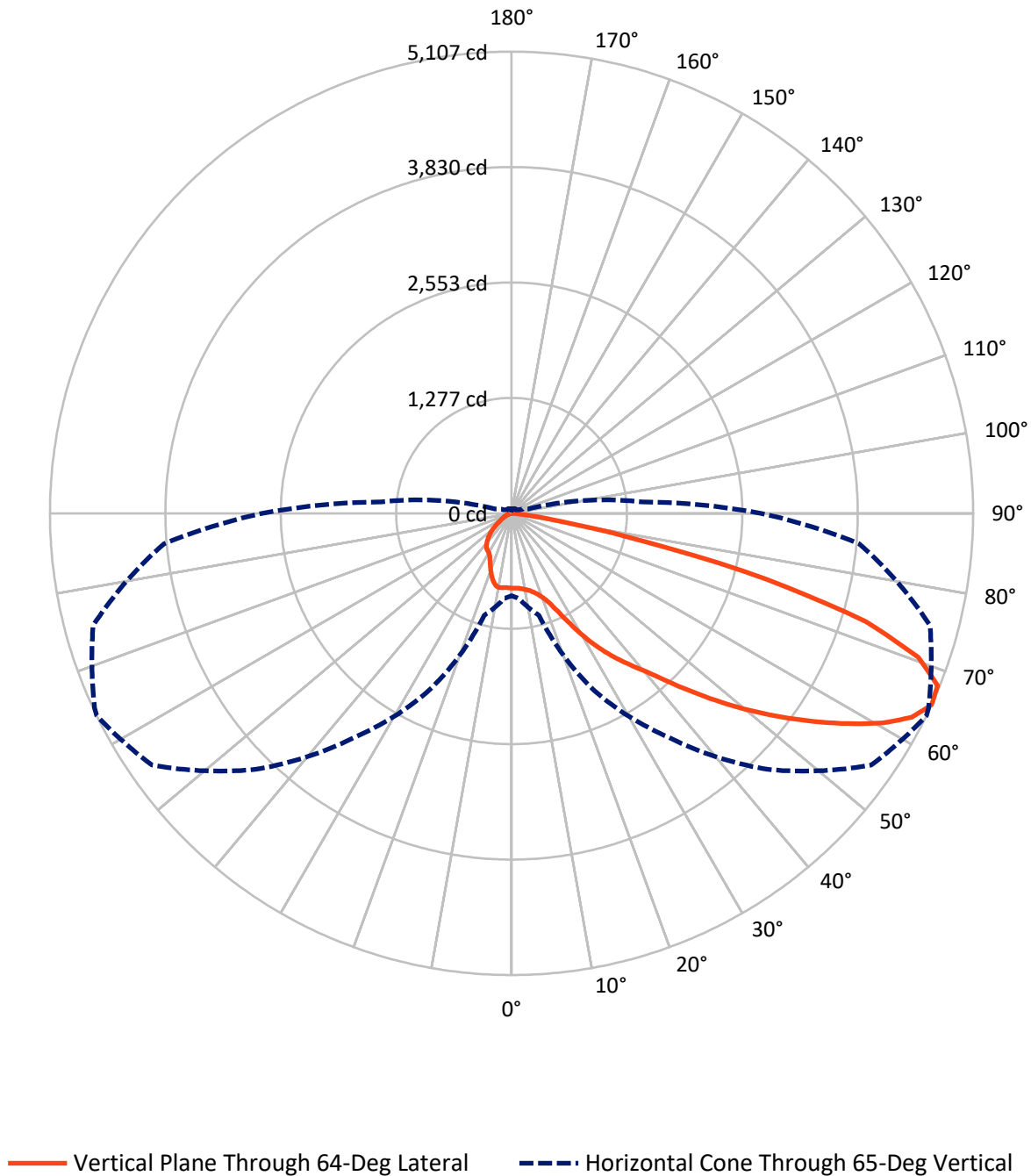


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc

Type III - Short - N/A

REPORT NUMBER: P961008
CATALOG NUMBER: NAV-SB1D-827-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961008

CATALOG NUMBER: NAV-SB1D-827-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	951.6	0.0	951.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6164.0	0.0	6164.0
	% Fixture	86.6	0.0	86.6
Total	Lumens	7115.5	0.0	7115.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	1.1
10°-20°	207.1	2.9
20°-30°	392.4	5.5
30°-40°	794.1	11.2
40°-50°	1352.8	19.0
50°-60°	1839.6	25.9
60°-70°	1727.5	24.3
70°-80°	692.1	9.7
80°-90°	33.5	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°	7115.5	100.0
0°-180°	7115.5	100.0

Coefficient of Utilization



REPORT NUMBER: P961008

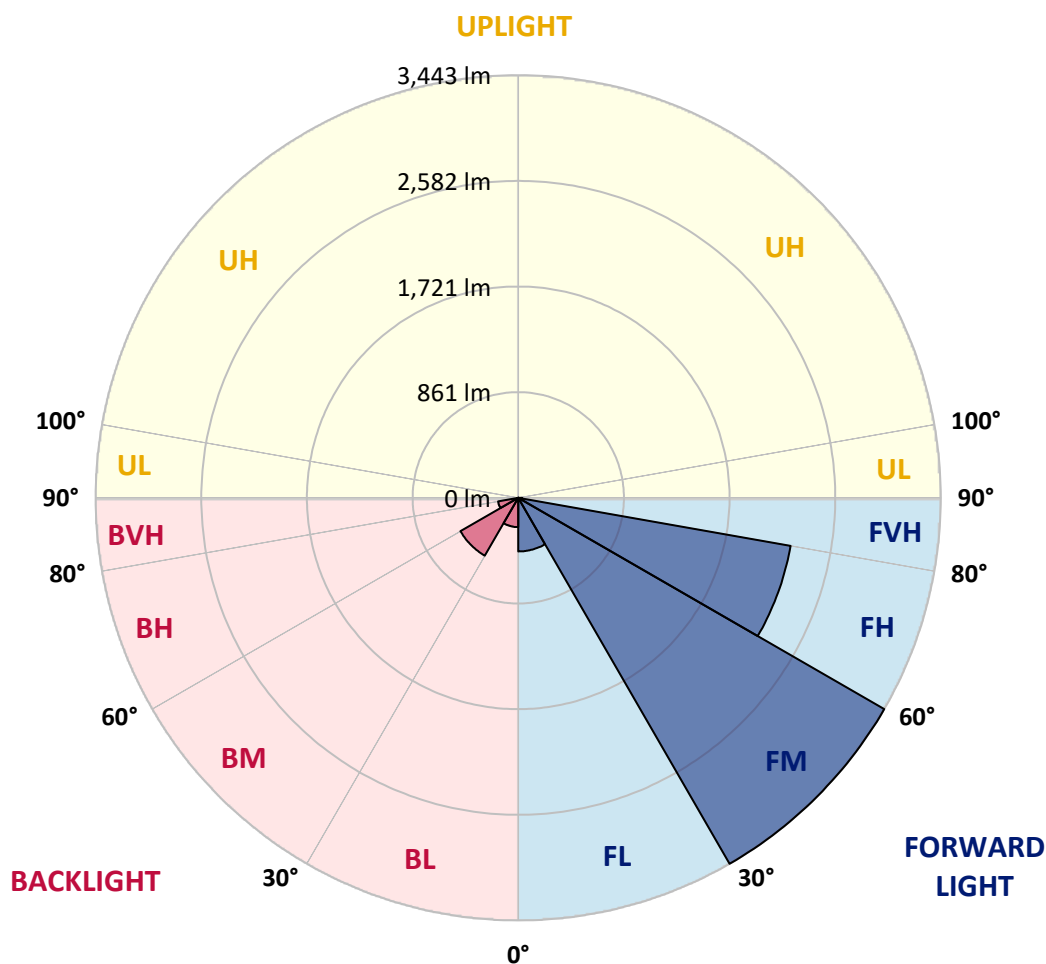
CATALOG NUMBER: NAV-SB1D-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	437.0	6.1			
FM	(30°-60°)	3442.5	48.4			
FH	(60°-80°)	2252.6	31.7			G2/5000
FVH	(80°-90°)	31.9	0.4			G1/100
BL	(0°-30°)	238.9	3.4	B1/500		
BM	(30°-60°)	544.0	7.6	B1/1000		
BH	(60°-80°)	167.0	2.3	B1/500		G1/500
BVH	(80°-90°)	1.6	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 Short



REPORT NUMBER: P961008

CATALOG NUMBER: NAV-SB1D-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6
2.5°	824.7	830.5	829.0	827.6	827.2	828.1	828.6	828.1	828.1	828.1	828.6
5°	809.0	813.7	813.7	817.1	821.8	827.6	831.9	832.8	833.8	835.3	834.8
7.5°	779.0	782.8	785.7	796.6	808.5	823.8	836.7	843.4	844.3	849.5	851.5
10°	758.4	763.2	768.0	779.4	796.6	819.5	841.4	857.6	860.1	872.5	878.2
12.5°	757.5	762.3	768.4	780.8	800.9	825.2	852.0	875.4	879.7	897.7	909.7
15°	767.5	773.3	779.0	794.3	815.7	845.2	873.9	903.0	907.2	933.1	945.9
17.5°	788.0	795.6	799.9	815.2	838.1	871.0	908.7	942.1	945.9	976.0	992.2
20°	828.6	837.6	839.1	851.5	873.9	909.2	954.1	995.5	1000.3	1034.6	1052.8
22.5°	912.6	925.4	914.0	920.1	940.2	975.5	1024.2	1076.7	1083.3	1122.4	1138.7
25°	1060.4	1078.5	1049.0	1038.4	1047.0	1083.7	1144.8	1211.1	1218.7	1250.2	1258.4
27.5°	1350.8	1327.5	1282.7	1238.8	1213.1	1234.0	1302.7	1384.8	1394.3	1424.9	1415.3
30°	1670.0	1649.5	1589.0	1491.6	1430.6	1427.2	1490.7	1582.3	1593.3	1622.3	1593.3
32.5°	1989.6	1970.0	1904.2	1784.5	1678.6	1626.2	1670.0	1771.6	1777.4	1795.9	1753.1
35°	2304.0	2283.9	2218.1	2095.5	1965.2	1846.0	1837.4	1951.9	1953.9	1973.4	1909.5
37.5°	2620.2	2603.5	2533.4	2413.2	2284.8	2120.3	2040.7	2122.7	2125.0	2144.2	2077.9
40°	2845.8	2853.0	2804.8	2711.8	2601.7	2421.8	2268.6	2304.4	2290.2	2322.0	2282.5
42.5°	3039.5	3053.8	3011.9	2965.1	2901.2	2742.8	2551.0	2544.9	2521.9	2539.1	2498.1
45°	3206.9	3218.9	3181.2	3170.2	3168.8	3057.7	2859.6	2822.4	2790.5	2787.2	2738.1
47.5°	3268.5	3291.4	3307.6	3344.3	3415.9	3369.1	3178.8	3121.1	3085.2	3059.1	2981.3
50°	3291.9	3316.2	3371.5	3478.3	3647.7	3667.8	3496.5	3431.6	3387.7	3340.1	3225.6
52.5°	3260.3	3303.8	3378.2	3558.0	3803.7	3907.2	3801.3	3744.5	3694.4	3616.7	3446.9
55°	3074.8	3118.3	3270.4	3557.1	3881.5	4075.1	4089.4	4064.1	4007.9	3885.3	3625.7
57.5°	2683.7	2748.0	2988.9	3435.9	3880.0	4219.6	4371.8	4390.0	4326.9	4151.5	3766.5
60°	2141.7	2229.1	2522.9	3167.4	3760.3	4297.8	4619.4	4710.0	4643.2	4413.8	3880.4
62.5°	1494.4	1595.6	1873.7	2746.6	3486.4	4241.6	4800.2	4967.6	4917.0	4648.5	3924.3
65°	911.5	944.0	1168.2	2161.3	3020.9	4005.9	4855.9	5106.9	5090.2	4792.1	3859.5
67.5°	607.2	634.4	698.8	1482.0	2345.0	3535.1	4722.4	5082.6	5087.3	4768.7	3621.9
70°	365.8	389.2	431.2	861.9	1519.8	2798.1	4308.8	4772.5	4800.2	4456.2	3171.7
72.5°	150.8	166.5	204.6	390.6	787.1	1775.9	3431.1	4097.5	4161.9	3746.9	2434.2
75°	85.4	93.5	120.2	196.1	341.5	827.6	2078.3	2908.8	3003.8	2582.5	1464.4
77.5°	56.8	60.6	77.8	126.9	192.2	282.4	888.2	1515.5	1696.7	1410.5	634.0
80°	38.1	41.5	53.4	84.9	124.9	121.2	282.9	561.4	690.7	484.6	154.6
82.5°	25.7	26.2	38.1	55.8	79.2	58.6	83.4	174.6	219.5	140.2	58.6
85°	14.8	14.3	28.2	32.4	35.3	24.3	25.3	52.5	68.7	59.1	33.4
87.5°	1.9	2.9	11.0	8.6	4.8	5.2	5.2	9.0	13.3	14.3	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P961008

CATALOG NUMBER: NAV-SB1D-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6
2.5°	828.6	828.1	826.7	825.2	821.8	820.0	820.9	820.0	819.5	820.0	821.8
5°	834.8	833.3	829.5	824.7	818.1	810.0	804.7	797.0	790.0	785.7	786.6
7.5°	851.5	850.0	844.8	831.4	810.0	776.1	745.1	717.9	697.4	685.4	685.9
10°	878.2	875.8	867.7	838.1	781.9	707.9	646.4	595.3	561.9	546.2	544.8
12.5°	909.7	906.8	892.5	831.9	728.4	612.9	528.1	471.3	440.2	426.4	425.0
15°	946.9	943.0	914.9	802.4	650.7	508.0	430.3	387.9	367.8	355.4	355.9
17.5°	993.1	986.5	931.6	758.0	566.2	427.8	370.1	338.2	320.5	308.6	307.7
20°	1053.2	1042.2	944.9	705.0	488.4	377.3	329.6	302.9	289.6	279.0	277.2
22.5°	1137.2	1121.5	961.1	647.8	433.6	342.5	299.6	280.0	269.1	257.1	255.2
25°	1241.2	1222.6	981.2	594.8	396.0	312.4	277.6	261.4	248.6	234.7	233.3
27.5°	1386.6	1353.3	1005.0	551.4	363.5	286.7	257.6	239.4	224.7	213.2	210.8
30°	1548.9	1494.0	1026.0	525.2	333.9	262.8	231.3	213.2	199.4	191.3	189.8
32.5°	1702.4	1628.0	1039.9	513.7	307.2	235.6	202.7	183.2	172.7	170.3	171.7
35°	1847.5	1749.2	1038.4	502.8	283.3	208.5	174.6	154.6	146.5	147.9	147.9
37.5°	2014.4	1878.4	1028.4	485.6	263.8	183.7	150.3	132.6	125.5	126.0	127.8
40°	2208.6	2027.8	1022.2	453.2	242.3	160.7	130.2	115.9	110.7	108.8	108.2
42.5°	2415.6	2172.3	1023.2	416.5	215.6	140.2	116.4	104.4	99.7	98.3	97.8
45°	2623.6	2310.1	1024.6	378.2	187.5	124.5	106.4	96.4	93.5	91.6	91.6
47.5°	2819.2	2427.5	997.9	337.2	159.8	112.5	98.3	91.6	89.2	86.8	86.8
50°	3001.3	2505.7	933.5	289.6	137.9	103.0	92.0	87.3	84.9	82.5	82.5
52.5°	3143.1	2518.1	827.2	240.4	122.6	95.8	88.3	83.9	81.1	78.7	78.2
55°	3206.0	2440.4	675.9	194.6	110.7	89.7	84.5	80.2	76.8	74.4	73.9
57.5°	3189.8	2276.7	527.1	156.4	99.2	83.4	79.6	76.8	73.0	69.2	68.7
60°	3110.1	2057.8	397.4	130.2	88.8	76.8	74.4	72.1	66.8	61.1	60.1
62.5°	2972.3	1782.6	283.3	107.8	77.3	69.2	68.2	66.3	58.6	48.2	47.3
65°	2761.5	1448.2	190.9	89.7	66.3	60.6	61.1	57.7	47.7	35.8	34.8
67.5°	2453.2	1058.9	122.1	73.5	55.4	50.5	51.0	49.1	40.6	30.5	29.1
70°	2060.7	701.2	79.6	55.8	44.4	39.2	42.0	42.4	34.3	24.8	23.9
72.5°	1510.6	414.0	55.8	41.5	32.4	27.2	34.3	35.3	27.7	18.6	17.6
75°	861.0	196.5	42.0	30.0	20.0	19.1	26.8	26.8	19.1	12.4	11.5
77.5°	361.6	82.0	29.6	19.6	11.5	11.0	18.1	16.7	9.5	5.7	5.7
80°	104.4	36.7	15.8	9.5	4.8	4.3	7.2	5.2	2.4	0.9	0.9
82.5°	41.0	16.2	6.1	3.8	1.9	1.9	0.9	0.0	0.0	0.0	0.0
85°	24.3	6.7	2.9	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.1	1.4	0.9	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)