

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: McGRAW-EDISON

Report Number: P300636

Luminaire Tested: **GLNA-AF-07-LED-E1-AFL-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300636
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-AFL-7027-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27204.8 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

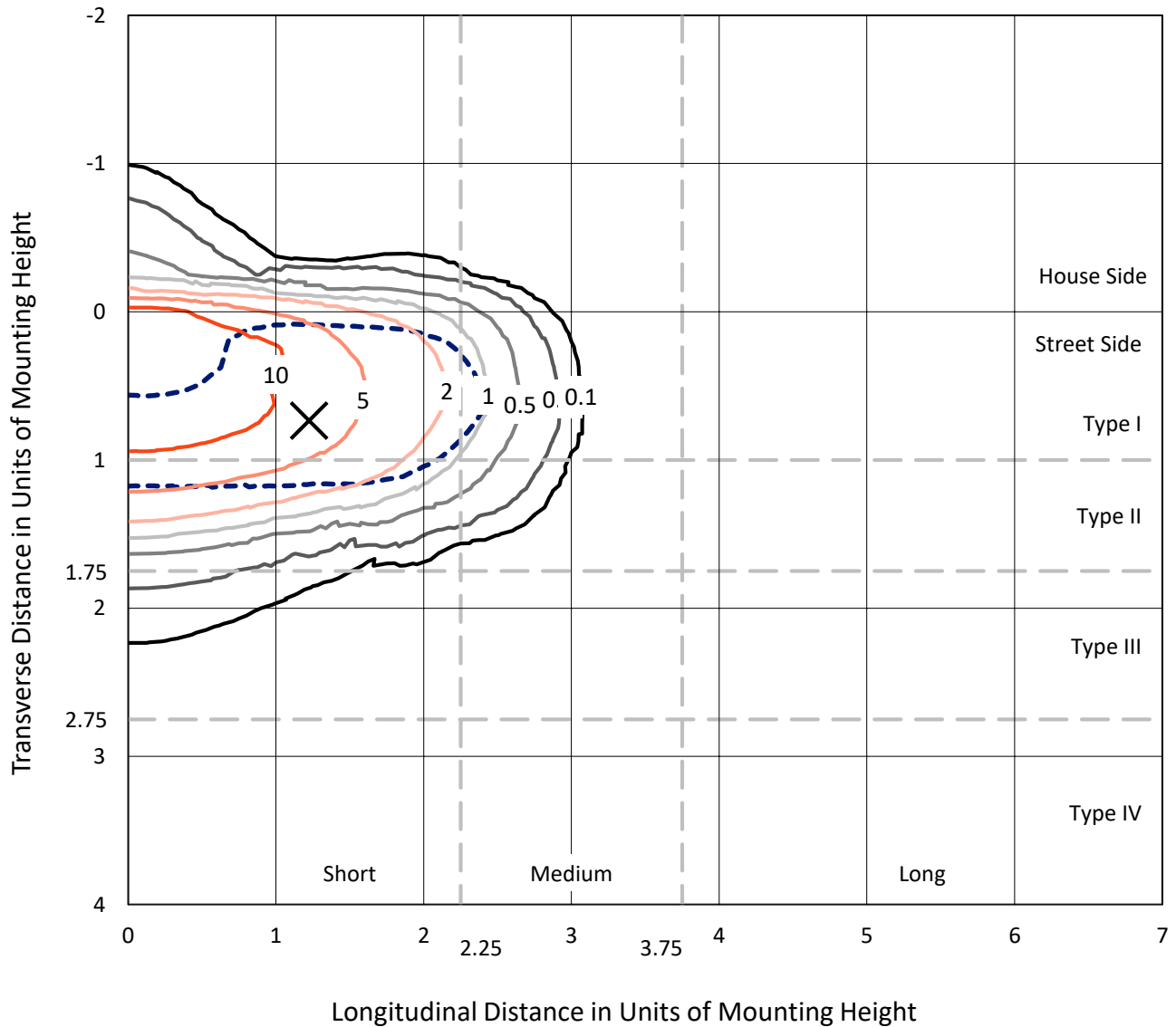
Input Watts (W): 391
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P300636
 CATALOG NUMBER: GLNA-AF-07-LED-E1-AFL-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

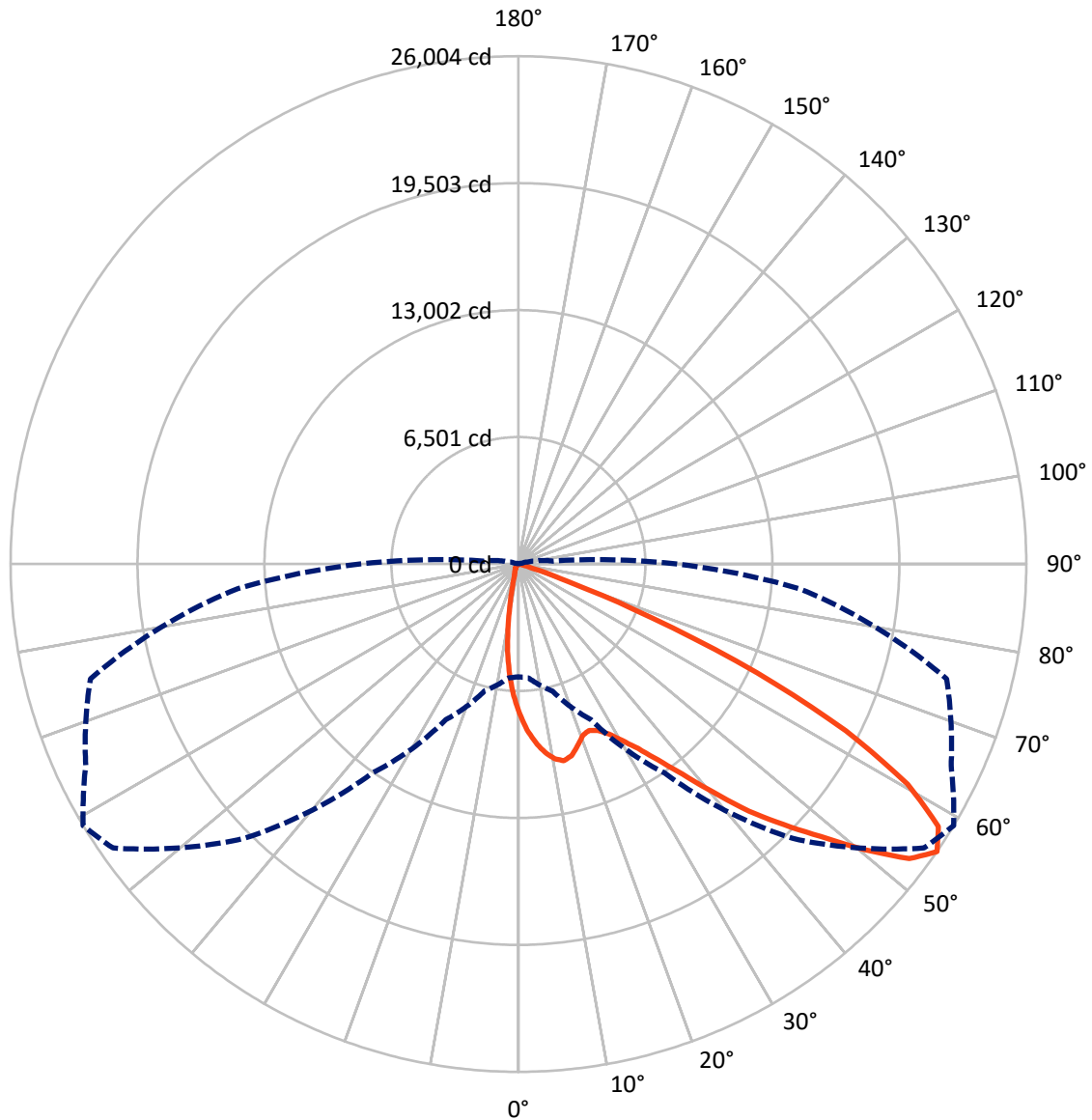
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.2 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300636
CATALOG NUMBER: GLNA-AF-07-LED-E1-AFL-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P300636

CATALOG NUMBER: GLNA-AF-07-LED-E1-AFL-7027-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1519.5	0.0	1519.5
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	25685.3	0.0	25685.3
	% Fixture	94.4	0.0	94.4
Total	Lumens	27204.8	0.0	27204.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	641.4	2.4
10°-20°	1535.8	5.6
20°-30°	2613.3	9.6
30°-40°	4494.4	16.5
40°-50°	6938.8	25.5
50°-60°	6975.7	25.6
60°-70°	3577.2	13.1
70°-80°	387.7	1.4
80°-90°	40.5	0.1
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°	27204.8	100.0
0°-180°	27204.8	100.0

Coefficient of Utilization



REPORT NUMBER: P300636

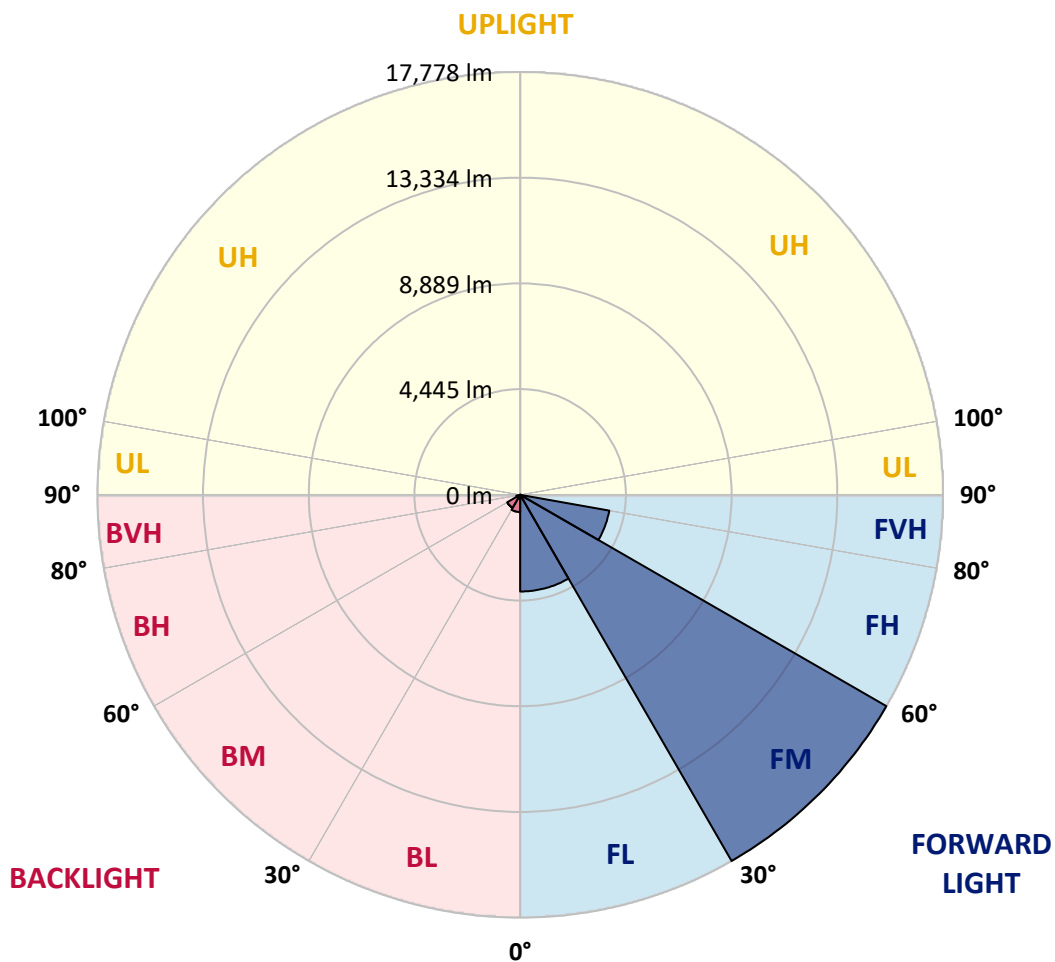
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4065.3	14.9			
FM	(30°-60°)	17778.2	65.3			
FH	(60°-80°)	3802.1	14.0			G2/5000
FVH	(80°-90°)	39.7	0.1			G1/100
BL	(0°-30°)	725.3	2.7	B2/1000		
BM	(30°-60°)	630.6	2.3	B1/1000		
BH	(60°-80°)	162.8	0.6	B1/500		G1/500
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P300636

CATALOG NUMBER: GLNA-AF-07-LED-E1-AFL-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1
2.5°	9061.2	8964.9	8936.0	8916.7	8828.4	8717.7	8566.7	8496.1	8351.6	8118.8	7833.0
5°	9891.3	9873.6	9809.4	9774.1	9679.3	9522.0	9281.2	9165.6	8936.0	8544.3	8032.1
7.5°	9528.4	9639.2	9727.5	9875.2	10061.4	10055.0	9852.7	9732.3	9475.4	8958.5	8253.7
10°	8126.8	8216.8	8361.2	8696.8	9380.7	9984.4	10222.0	10135.3	9929.8	9339.0	8467.2
12.5°	7852.3	7842.7	7868.4	7966.3	8324.3	9184.8	10159.4	10334.4	10292.6	9687.4	8669.5
15°	7998.4	7987.2	7984.0	8017.7	8104.4	8467.2	9689.0	10191.5	10514.2	10010.1	8841.3
17.5°	8407.8	8359.6	8334.0	8306.7	8281.0	8370.9	9123.8	9791.7	10547.9	10292.6	8984.2
20°	9109.4	9029.1	8934.4	8780.3	8635.8	8590.8	8886.2	9380.7	10427.5	10507.7	9077.3
22.5°	9990.8	9888.0	9724.3	9443.3	9149.5	8979.3	9003.4	9250.7	10247.7	10742.1	9120.6
25°	10981.4	10849.7	10631.4	10241.2	9809.4	9507.5	9350.2	9436.9	10165.8	11016.7	9170.4
27.5°	12042.6	11896.5	11610.7	11079.3	10589.6	10181.8	9860.7	9849.5	10305.5	11376.3	9250.7
30°	13094.1	13071.7	12699.2	12137.3	11488.7	10992.6	10530.2	10470.8	10695.6	11874.0	9409.6
32.5°	14497.3	14328.7	13872.8	13294.8	12546.7	11951.1	11403.6	11265.5	11294.4	12453.6	9655.2
35°	16266.5	16081.9	15439.7	14641.8	13805.4	13102.2	12496.9	12309.1	12238.4	13402.4	10069.5
37.5°	17409.6	17406.4	17003.4	16191.1	15293.6	14518.2	13860.0	13640.0	13497.1	14548.7	10711.6
40°	17440.1	17515.6	17568.6	17560.5	16921.6	16207.1	15622.8	15351.4	15019.1	16080.3	11541.7
42.5°	16504.2	16698.4	17165.6	17958.7	18337.6	18053.4	17560.5	17294.0	16799.6	17719.5	12553.1
45°	15239.0	15373.9	16191.1	17652.1	19105.0	19883.6	19508.0	19031.1	18379.3	19429.3	13460.2
47.5°	14672.3	14696.4	15224.6	16828.5	19162.8	21383.1	21611.1	20835.7	19814.6	20806.8	14169.8
50°	12978.6	13021.9	13750.8	15401.2	18485.3	22091.2	23723.9	22988.6	21379.9	21868.0	14428.3
52.5°	9782.1	9843.1	10767.8	13055.6	16623.0	21789.3	25236.3	25058.1	23094.6	22386.6	14442.7
55°	5771.6	5851.9	6734.9	8788.3	13074.9	19869.2	25348.6	26003.7	24448.0	22693.2	14420.3
57.5°	2695.6	2751.8	3257.5	4527.4	8131.7	15703.0	23656.5	25355.1	25194.5	22855.4	14579.2
60°	1432.1	1448.1	1570.1	1960.3	3674.9	9957.1	20354.0	22895.5	24513.8	23080.1	14773.5
62.5°	1094.9	1099.7	1093.3	1139.9	1544.5	4419.8	15385.1	18822.4	21773.3	22911.5	14558.3
65°	948.8	956.9	911.9	900.7	990.6	1576.6	9139.9	13416.8	17109.4	20636.6	13092.5
67.5°	850.9	854.1	799.5	753.0	769.0	852.5	3605.9	7345.0	11324.9	15126.7	9489.9
70°	783.5	780.3	720.9	647.0	626.1	582.8	1146.3	2692.4	5412.0	7670.9	4413.4
72.5°	693.6	695.2	666.3	569.9	520.2	407.8	531.4	785.1	1615.1	2090.3	1033.9
75°	614.9	606.9	571.5	510.5	428.7	268.1	263.3	350.0	497.7	494.5	223.2
77.5°	444.7	436.7	447.9	419.0	329.1	173.4	131.6	168.6	202.3	195.9	62.6
80°	325.9	321.1	289.0	348.4	290.6	118.8	81.9	89.9	104.4	88.3	19.3
82.5°	223.2	221.6	203.9	192.7	165.4	72.2	51.4	56.2	67.4	49.8	9.6
85°	35.3	40.1	147.7	117.2	97.9	32.1	35.3	38.5	45.0	27.3	3.2
87.5°	0.0	0.0	69.0	61.0	19.3	12.8	20.9	22.5	22.5	14.4	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



REPORT NUMBER: P300636

CATALOG NUMBER: GLNA-AF-07-LED-E1-AFL-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1	7658.1
2.5°	7687.0	7526.4	7229.4	6922.8	6638.6	6299.8	6067.0	5892.0	5689.8	5635.2	5754.0
5°	7739.9	7436.5	6797.5	6102.4	5448.9	4724.9	4171.0	3732.7	3336.2	3201.3	3323.3
7.5°	7823.4	7372.3	6330.3	5185.6	4049.0	2918.7	2144.9	1636.0	1311.7	1215.3	1266.7
10°	7906.9	7279.2	5789.3	4100.4	2546.3	1420.8	924.7	738.5	669.5	655.0	663.1
12.5°	7975.9	7153.9	5129.5	2915.5	1361.4	761.0	605.3	574.8	565.1	565.1	568.3
15°	8017.7	6964.5	4347.6	1854.3	783.5	574.8	528.2	518.6	518.6	520.2	523.4
17.5°	8012.9	6723.7	3491.9	1122.2	586.0	508.9	481.6	473.6	472.0	475.2	476.8
20°	7953.5	6409.0	2633.0	740.1	510.5	464.0	436.7	422.2	420.6	423.8	427.1
22.5°	7841.1	6020.5	1883.2	569.9	460.8	420.6	386.9	374.1	374.1	377.3	380.5
25°	7704.6	5545.3	1287.6	483.2	415.8	374.1	342.0	330.7	333.9	342.0	343.6
27.5°	7534.4	5010.6	875.0	414.2	361.2	327.5	303.4	295.4	303.4	314.7	317.9
30°	7388.3	4453.6	624.5	358.0	306.6	282.6	268.1	268.1	279.4	300.2	305.0
32.5°	7276.0	3914.1	481.6	316.3	266.5	245.6	237.6	245.6	263.3	284.2	289.0
35°	7261.5	3469.4	407.8	282.6	237.6	216.7	213.5	228.0	245.6	261.7	264.9
37.5°	7372.3	3058.4	367.7	255.3	211.9	192.7	189.4	207.1	224.8	244.0	248.8
40°	7582.6	2735.7	338.8	229.6	191.0	170.2	163.8	176.6	200.7	226.4	232.8
42.5°	7855.5	2469.2	306.6	203.9	170.2	141.3	133.3	147.7	173.4	200.7	208.7
45°	8115.6	2239.6	271.3	175.0	142.9	109.2	106.0	125.2	138.1	165.4	171.8
47.5°	8258.5	2037.3	240.8	142.9	110.8	88.3	88.3	93.1	106.0	138.1	144.5
50°	8210.3	1875.2	208.7	106.0	77.1	67.4	67.4	65.8	85.1	110.8	115.6
52.5°	8114.0	1782.1	179.8	81.9	53.0	48.2	43.3	48.2	59.4	70.6	72.2
55°	8099.6	1766.0	150.9	65.8	36.9	32.1	24.1	24.1	24.1	22.5	19.3
57.5°	8211.9	1791.7	126.8	53.0	27.3	20.9	12.8	0.0	0.0	0.0	0.0
60°	8327.5	1819.0	109.2	36.9	19.3	11.2	1.6	0.0	0.0	0.0	0.0
62.5°	8134.9	1758.0	91.5	22.5	14.4	4.8	0.0	0.0	0.0	0.0	0.0
65°	7145.9	1496.3	72.2	16.1	9.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5082.9	1001.8	48.2	9.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
70°	2319.9	419.0	30.5	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	496.1	130.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	101.1	94.7	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	32.1	149.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.3	107.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.2	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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)